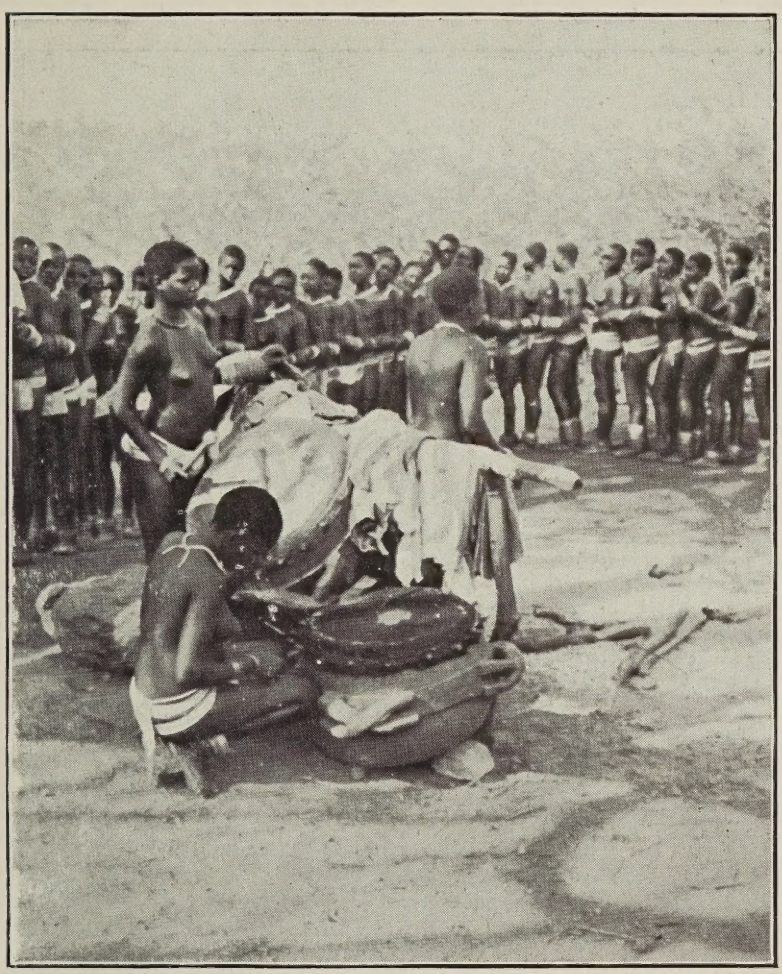
Pam
Med. Miss.
Africa

WHO IS MY NEIGHBOUR?

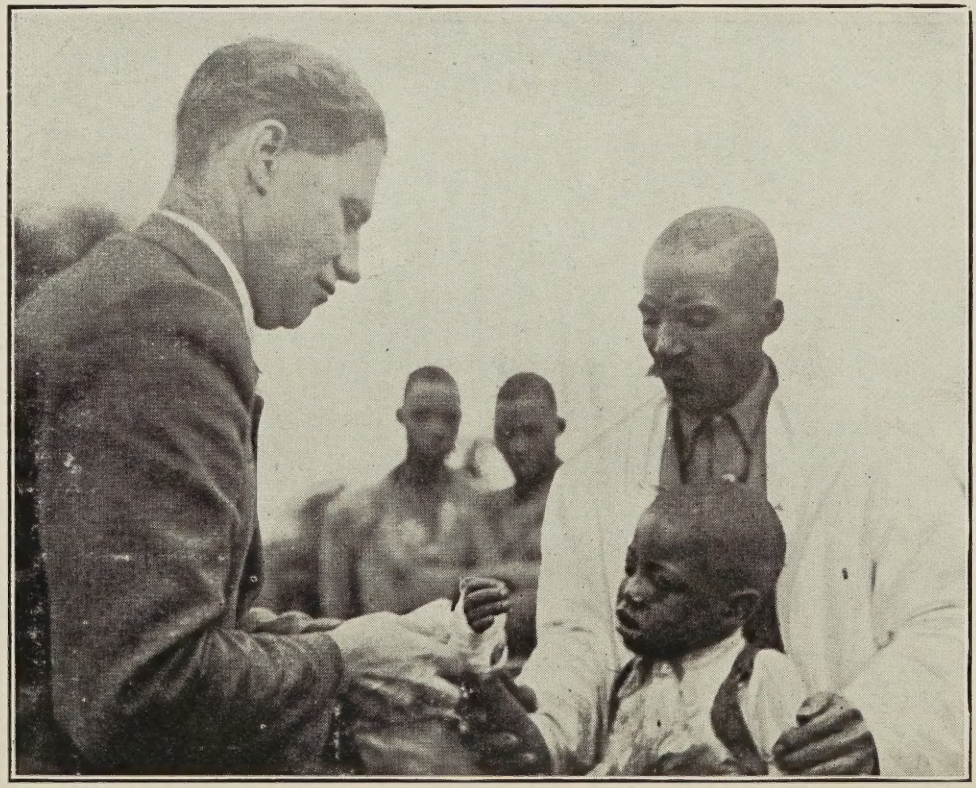
The Story of a Mission Hospital in South Africa

R. D. Aitken

THE LOVEDALE PRESS
1944



VENDA GIRLS PERFORMING THE "PYTHON DANCE" AT A *DOMBA*



A ROADSIDE DRESSING

Who Is My Neighbour ?

The Story of a Mission Hospital in South Africa

BY

R. D. AITKEN, D.Sc. (S. Africa), M.D., Ch.B. (Edin).

Medical Superintendent, Donald Fraser Hospital, Sibasa, N. Transvaal.

THE LOVEDALE PRESS
1944

THIS book is for
MY WIFE
without whose constant companionship, encouragement
and help there would have been no story
to tell.

CONTENTS.

Author's Preface		.. ..	4
Chapter	I.	Early Experiences	5
,,	II.	Building a Hospital	10
,,	III.	Healing the Sick	14
,,	IV.	Training Native Nurses	18
,,	V.	I Become a District Surgeon	21
,,	VI.	The Development of the Hospital	25
,,	VII.	Mothers and Babies	30
,,	VIII.	The Blind, the Lame and the Possessed ..	33
,,	IX.	What it Costs	37
,,	X.	The Transvaal Provincial Council and Mission Hospitals	41
,,	XI.	The Land and the People	47
,,	XII.	Women and Children	52
,,	XIII.	Teachers and Scholars	55
,,	XIV.	What Should be Done?	58
,,	XV.	An Improved Curative Service	63
,,	XVI.	The Scheme in Operation	67
,,	XVII.	Conclusion	72

AUTHOR'S PREFACE.

This book is an attempt to tell a very simple story. It does not contain any dramatic accounts of wonderful operations and amazing cures. I have no doubt there are many doctors in South Africa who could tell of more exciting experiences and of greater achievements. It is not so much my purpose to tell of what has been accomplished, as to present a picture of a people fallen by the wayside, to demonstrate their need for help and to suggest ways in which that help can most effectively be given. I believe there is a growing concern for the welfare of our Native people in South Africa, and there are available many publications, reports of Commissions and other documents from which information can be obtained as to their needs. I have felt, however, that a plain tale, such as I have tried to tell, may perhaps be more easily read than these more important volumes, and may help some at least to see the need more vividly.

I hope, too, that this book may help to make the work of mission hospitals in South Africa better known. They have done, and are doing, a great deal for the relief of suffering in the Native areas, and the story told here is only one of many more that might be told. I hope they will long continue to play their part in the campaign against disease and superstition in our land, and I shall be very happy if this book leads to greater interest in and support for their work.

I am greatly indebted to Dr. N. Macvicar for having read through the manuscript, and for making several valuable suggestions for its improvement.

R. D. Aitken.

CHAPTER I.

EARLY EXPERIENCES.

At the end of January, 1933, my wife and I arrived at a little known mission station in a remote part of the Northern Transvaal to begin the task of bringing medical help within reach of a large tribe of Native people. Our journey north had not been without its difficulties, for I was only just recovering from a severe dental operation and found the long motor journey from Natal something of a strain. In Pretoria we got word of severe floods in the north and, on reaching Louis Trichardt, we found the whole countryside flooded and almost all traffic at a standstill. Over twenty inches of rain had fallen in fourteen days. Rivers were in flood and roads under water. Almost every motor bus in the railway road-motor service was stuck somewhere outside Louis Trichardt. We made two attempts to reach Sibasa but on each occasion we had to turn back. The second time we were towed by oxen for half a mile through water nearly a foot deep. A few miles further on the road became a mass of deep mud, and it was evident that no car could get through, so back we had to go. Ten days passed before we were able to get as far as Sibasa. From there we had still another eleven miles to go to reach our final destination, and two unbridged rivers to cross on the way. We approached the first of these with considerable trepidation, but decided to risk it and somehow or other the car struggled through, although the water was well over the running boards and was coming into the back of the car. So at last we came to Gooldville.

Our first impressions were not very favourable and our hearts sank a little as we contemplated making our home there. We approached the station along a gloomy avenue of silver oak trees which led past the church and school to the old mission house. Everywhere there were signs of neglect and decay. The station had been deserted for over a year and in the tropical climate everything is quickly overgrown. The mission house was covered by a thick creeper which shut out the light from the rooms. The woodwork of the verandahs was rotten and falling to pieces. Inside the house was full of dust and cobwebs, not to mention lizards and spiders. Some Native women from the neighbourhood came to help us, and we got the place cleaned out and scrubbed and some of our furniture unpacked. By the time darkness came, we were more than ready for our beds.

In addition to the small mission house, there were at that time two other buildings on the station. One was a church and school combined. The other was a two-roomed cottage which had been somewhat hurriedly erected as a temporary dwelling house for my predecessor, a doctor from Scotland who had arrived here in 1930, but had to resign after about eighteen months on account of his wife's health. This building became my first consulting room and dispensary. Apart from these two brick buildings, there were a few pole and daub thatched huts in varying states

of repair, some of which were to serve for several months as the " wards " of our " hospital."

Today, over ten years later, the whole station has been completely transformed. The old mission house which was in such a dilapidated condition in 1933, has been renovated and altered and now forms a small part of a much larger building, the Donald Fraser Hospital. In the wards of the hospital we can accommodate fifty patients. A pleasant dwelling house has been built for the doctor and a cottage for the European staff. There is a large and comfortable home for the Native nurses. The church has been renovated and we are preparing to build a new school with five or six class rooms. Three hydraulic rams keep the hospital supplied with water from a small stream half a mile away. An electric lighting plant and a water borne sewerage system have been installed. The thick, almost impenetrable, bush which covered most of the mission land so densely ten years ago has almost all been cleared and in its place orchards and gardens and grazing paddocks are being established. In these pages I hope to tell the story of how these changes have come about.

The district to which we had come is situated in the extreme north of the Union and even now is comparatively little known to most South Africans. Although it is only a day's journey by car from Johannesburg, it is seldom visited by any other than Government officials and a few scientists interested in anthropological and ethnological studies. To the north lies the Limpopo River and Rhodesia and to the east the Kruger National Park. The Zoutpansberg range of mountains runs from west to east through the district, and its well wooded hills and valleys make it one of the most beautiful districts in the Transvaal. The Levubu or Pafuri River flows in a north-easterly direction to join the Limpopo, and south and east of this the land is low and more or less flat—the typical low veld.

Two tribes inhabit the district. In the mountains and valleys of the Zoutpansberg are the Bavenda, while east of the Levubu River are the Shangaans. In former times these two tribes were bitter enemies, and the line of demarcation between them was very definite. At the present time, although the old feelings of hostility have not entirely disappeared, there has been considerable intermixture on both sides of the boundary and, to some extent, even of intermarriage, but in habits, customs, clothing and language, the two people are still quite distinct.

When I arrived in 1933 I had no idea of the population of this Sibasa area, but since then a census has been taken and, as a result of this, it was computed that the population numbered 153,000. From other available data, such as the number of registered taxpayers, it seems probable that this figure is more or less accurate.

I had come north with the object of bringing medical help to the Native people in the Sibasa area, and I suppose I can claim to have been in some sense a medical pioneer there. It was said of the old Voortrekkers that they began to feel cramped for space if they could see the smoke of another homestead from their own stoep. By coming to Sibasa I had certainly moved far away from all my medical colleagues, and even now my nearest professional neighbour is over fifty miles away. I believe that I could

travel due east from my present station for nearly 600 miles to the coast and not find another doctor on the whole journey. Sixty miles away to the south-west is Louis Trichardt, with three doctors, and Elim Hospital with another three. These are easier of access now that roads have been greatly improved, but in those days they seemed far away indeed. I do not know where my nearest medical neighbour is in Rhodesia, but there is none between me and that country. So even now I can look out from my home over a great expanse of country and claim it as mine. I hope that I shall not on that account resent the coming of more doctors into this area, but rather that, I may have helped to prepare the way for their coming.

We were not quite so cut off from other neighbours as we were from doctors, but it was a lonely spot to which we had come. All round us, of course, there were hundreds of Native villages, and at nights we could hear the drums thudding and the dancers shrieking, but these sounds made us feel, if anything, more remote than ever from the orderly, civilized life to which we had been accustomed. Our nearest European neighbours were at a Salvation Army settlement, five miles away. Across a deep river valley we could see the Native Affairs Department's offices, eleven miles away by road. Almost hidden in the mountains nearly twenty miles away we could just make out a mission station, belonging to the Berlin Mission. Later on we found other European neighbours who became very good friends, but at first we felt very isolated.

We were soon to realize that there was a great need for medical help amongst these long neglected people, and to realize also the difficulty of meeting that need with very inadequate resources and equipment. We could not speak their language and they were accustomed to their own Native herbalists and witch-doctors whose methods were very different from ours. No wonder they regarded us with suspicion, and were afraid to trust themselves to our care. Yet slowly and hesitatingly they began to come to get our advice and to try our medicine, and confidence began to grow and the knowledge to spread that there was a White doctor in the district who seemed to be able to treat the diseases of Black people. Within a very few days of our arrival, the Chief sent me my first patient, a woman with a septic foot. It was quite evident that she would require an anaesthetic while I made an incision to drain away the pus. There was no place ready for dealing with such cases and I decided that the best thing to do was to spread a clean sheet on the grass outside, and do the operation there.

One of the earliest cases brought to me was a young woman suffering from a disease known as Madura foot. In this condition a fungus invades and slowly destroys all the tissues of the foot, including the bones. This poor girl was in a miserable condition. Her foot was swollen and painful and covered with numerous openings through which a thin discharge escaped. She was dreadfully thin, and could drag herself about only with great difficulty. There was, unfortunately, only one possible treatment—amputation of the foot. The Native people dread amputation and will often die before they consent to it. However, in this case, after

much persuasion, the patient and her relatives agreed. Then came the question : Whether I should risk doing the operation myself, or if I should take her to Elim Hospital. I had no hospital, no anaesthetist, no trained nurse, but Elim was far away and the girl's parents refused to have her taken there, so I decided to take my courage in both hands and go ahead. I got a room ready as an operating theatre, and explained to my wife exactly what I wanted her to do. I also got a Native man to help with the anaesthetic. The night before the operation I lay awake half the night going over and over again the necessary steps to be taken and the difficulties which might arise. Next morning I very nearly called the whole thing off, but in the end I persisted. The operation was successful. We nursed the patient in a hut. The stump healed quickly and cleanly, and in time I was able to supply the patient with a wooden leg. I still see her occasionally walking about quite actively on her peg leg. She is a fine healthy woman now, married, and with children of her own. She is surely an example to the people here that, after all, it is better to lose a limb than to lose life itself.

Another patient in those early days was a cripple. He had evidently suffered from infantile paralysis at one time or other and had completely lost the use of his legs, which had become bent up under him. He got about on his hands, and could move surprisingly fast in this way. One day he got a thorn in one of his hands. The wound became infected and the hand swollen and painful. Then, of course, he could not make his way up the hill to come to see me, and I had to go and attend him in his hut. It was soon apparent that an incision would have to be made in the hand, so I took my instruments and a bottle of chloroform to his hut. My wife was away just then, so she could not help me with the anaesthetic as she often did in those days. I had been teaching a young man to help me, and I took him along. I induced anaesthesia in the patient and then told my assistant to carry on while I made my preparations to operate. Suddenly I noticed that the patient had stopped breathing, and I had to leave everything and perform artificial respiration. He recovered after a few minutes and I was able to complete the operation, and a few days later he was much better. As we walked home, I explained to my assistant the difficulties of anaesthesia and the importance of keeping the patient breathing. He remarked very soberly : " This is a dangerous work," and I was not at all surprised when he came to tell me soon afterwards that he had decided to go to College to be trained as a teacher. The little cripple still crawls about on his hands and my young assistant is now a certificated teacher. Whenever I see either of them, I recall those anxious moments in the hut, when the cripple's life hung in the balance.

In recent years midwifery has become an increasingly important part of the work of the hospital, but at first only the most desperate cases were brought to me. The first case of all was a woman who was said to have been in labour for several days. Through some misunderstanding, all my instruments had not arrived when I did, and I found to my horror that I had not the things I most needed. Somehow or other, I managed to deliver the patient of a dead infant with an enormously enlarged head

(hydrocephalus), but she died soon afterwards. In spite of this, however, patients continued to come seeking help, and in that first year we treated 94 patients in our so-called "hospital," performed 39 operations and attended 7 confinements. Of those 94 patients, only 6 died and so we felt that we had begun to demonstrate to the Native people that everyone who goes to hospital does not die.

Incidentally, I may mention that one of my first patients was myself. I had had all my lower teeth extracted a month previously, and, unfortunately, two had been broken and the stumps left in the jaw. These gradually worked loose and began to annoy me. The nearest dentist was in Louis Trichardt, 60 miles away, and the roads at that time were really appalling. So one Sunday morning I got a pair of dental forceps and stood in front of a looking-glass and got those two loose stumps out. It gave me great pleasure to send them back to the dentist who had been responsible for breaking them, although I realized that their condition was such that he was in no way to blame for doing so.

CHAPTER II.

BUILDING A HOSPITAL.

I had come to Gooldville, not only as a doctor, but as a missionary, and on my first Sunday there I preached to the Native congregation from the words in the book of Nehemiah : " Come and let us build up the walls of Jerusalem," and ever since then I have been occupied, year after year, with building operations of one kind or another. It was soon apparent, of course, that it would be impossible to accomplish really good work until I had at least a small hospital. In my report to the Mission Committee at the end of the first year, I wrote :

> " The work has been carried on throughout the year under very great difficulties owing to lack of suitable accommodation for patients. There is, at present, no hospital but there are four huts in which patients can stay while undergoing treatment. The patients bring their own blankets and food, and usually a relative comes to cook for them. The accommodation, poor as it is, has often proved inadequate and on one occasion we had to erect temporary grass shelters at short notice.
>
> " Huts of this kind are useful for patients coming from a distance, who do not need hospitalization, but require to be under a doctor's care for a time. They are also needed for the relatives of patients. Even for this purpose we should have something better than the present huts. This type of accommodation is, however, quite unsuitable for people who are really seriously ill. The nursing of such patients under these conditions is a most anxious and difficult task. It is almost impossible to exercise adequate supervision, or even to keep dressings clean, in many cases. In these circumstances, I have tried to avoid surgical work as much as possible, but in cases of emergency, I have felt justified in taking the grave risk of operating. Only the prospect of improved conditions in the near future has enabled us to carry on at all."

My instructions from our Committee were that I was to examine very carefully the suitability of the station for medical work and give particular attention to the possibility of securing an adequate water supply. If it appeared desirable, I was to recommend the removal of our work to another site. At the time, the station depended for its water supply upon a few rain-water tanks. An estimate for the erection of a pumping plant to bring water from a stream half-a-mile away was well over £1,000, and we knew that this was far beyond our means.

My first task, then, was to investigate the possibility of getting a reliable water supply, and I found upon enquiring that the price quoted had included a small purifying plant of the kind, I was told, that is usually supplied to a small municipality. I decided that we could do without that for a start and eventually I was able to get a hydraulic ram installed to pump the water half-a-mile to the hospital and lift it over 300 feet, at a

cost of £223 4s. 5d. The new supply was completed on the 16th July, 1933, a few days before our rain-water tanks ran dry.

By this time we had decided that we should build a new dwelling house for myself and my family, and, as soon as we could move into that, we would convert the old mission house into a small hospital. The committee in Scotland were willing to pay for building my house and putting in the new water supply, but they quite rightly felt that the money for building a hospital should be found in South Africa. In view of this, I made application to the Native Affairs Department for £2,500 to build a small hospital. That seemed little enough with which to start. My first application met with no success, but about that time I received a copy of the report of the Native Economic Commission, and from this I discovered that the people in the Sibasa area were paying, approximately, £25,000 per annum in taxes to the Government. At that time, only one-fifth of the poll-tax was paid into the Native Development Fund to be used for Native education. The remaining four-fifths went into general revenue. Yet in spite of this very large sum received in taxes, the Government was doing nothing for the health of the people. Armed with these figures, I renewed my application, and this time received an offer of £500, on condition that another £500 was forthcoming from other sources. My first feeling was one of bitter disappointment. I had no idea where another £500 could be obtained, and even if we got it, £1,000 seemed pitifully inadequate for the purpose of building even a small hospital.

After the first disappointment, however, we set to work to try to find that other £500. Meantime, work on my new house was commenced and this was completed in October 1933. By the end of the year we had received £350 towards the needed £500, and we began the reconstruction of the old mission house. My wife and I spent many weary hours discussing what we should do with that old house. Many a time we felt like pulling it down altogether and building on new foundations, but with only £1,000 available and beds and furniture and equipment to purchase, we soon found that was impossible. It was evident also that we would have to get a Native builder to do the work, as we could not afford to employ a contractor. Finally, we decided to take the roof off the old building, raise the walls by two feet, and put the roof back again. We also determined to take out all the old windows and doors, and replace them with bigger ones.

We began work in December, just when the rains were expected, and we had some anxious days when we got the roof off and the old plaster stripped from the walls, for we felt very doubtful whether those old walls with their bricks set in mud, would stand up to a real tropical downpour. We did get one scare, and hurriedly put the galvanised iron sheets into position to protect the walls. As a result, they were no longer in the order in which they had been carefully placed when taken off, and we had some difficulty in fitting them into place when we finally put the roof on again. Fortunately, we got that completed before the big rains began, and that old building is still in use today, and provides accommodation for 18 to 20 patients.

That gave us two wards, but we needed also an operating theatre, a dispensary and an out-patient room, and we had next to erect a building to provide these essentials. By this time, we had also received the balance to make up the £500, which enabled us to claim the full £500 from the Native Affairs Department. We had found a very good friend in the Rev. J. Bruce Gardiner of St. George's Presbyterian Church, Johannesburg, and he had interested others to the extent of providing that necessary amount.

By the middle of August, 1934, a little more than eighteen months after our arrival at Gooldville, we had a small hospital ready for use. It consisted of two wards with twelve beds, an operating theatre, surgery, dispensary and office, with a kitchen, bathroom and lavatory, and linen-room. The actual building had cost us £663 4s. 3d., furniture £161 13s. 11d., and surgical equipment £174 12s. 9d., a total of £999 10s. 11d., so that we had a balance of 9s. 1d. left out of the £1,000 we had received for building the hospital. When I look back now and think of all the developments that have since taken place, I wonder whether there was ever a thousand pounds put to better use than that.

When the buildings were completed, Mr. J. H. Hofmeyr, then Minister for Public Health, came to Sibasa to open The Donald Fraser Hospital. We are often asked to explain the name. Donald Fraser was one of the most beloved of Scottish missionaries who spent most of his life working in Nyasaland. He made two visits to South Africa, one in 1896, when he came principally in the interests of the Student Christian Movement, an organization which had had a considerable influence upon the lives of my wife and myself, and again in 1925, when he conducted a great missionary campaign throughout the country. He returned to Scotland deeply impressed by the need for medical missionary work in this country and was able to secure a large sum of money for the purpose of starting such work. As a result, three mission hospitals were eventually established, of which the one at Sibasa was the latest to be built. When the scheme was started, Dr. Fraser received the impression that, if the Church of Scotland would initiate it, the South African Government would support it in such a way that within at most five years it would no longer require any financial assistance from overseas. The Church of Scotland sponsored the scheme on this understanding but, unfortunately, changes occurred in South Africa and the expectations of Dr. Fraser were not realized, and, when the original sum given for the purpose was exhausted, it looked for a time as if the work, which had begun with so much promise, would have to be abandoned. Just before his death, however, Dr. Fraser persuaded the Foreign Mission Committee of the Church of Scotland to undertake permanent responsibility for these three South African medical missions. He died in August 1933 and as our hospital was opened a year later we asked and received permission to call it " The Donald Fraser Hospital," thus commemorating the great service he had rendered to South Africa, although he himself had been a missionary elsewhere.

The opening ceremony was a great occasion. Never before had any

important member of the Government visited Sibasa. Chiefs and people came from far and near, and many friendly Europeans also came to show their interest and pleasure in the great event. Five oxen, given by various Chiefs, were slaughtered, and after Mr. Hofmeyr had declared the hospital open the people partook of a great feast. From that small beginning, the work has grown, sometimes in very unexpected ways, to what it is today.

CHAPTER III.

HEALING THE SICK.

Those who live in a settled orderly community with doctors and hospitals within easy reach have little idea of the suffering and disease which goes untended and unchecked in the country districts, and particularly in the Native areas. Some instances from my experiences in the eleven years of practice here may help them to realize more clearly what it means to live in an area where there is only one doctor, where there are scarcely any telephones, and roads are bad and rivers unbridged.

Even before the buildings of which I have already written were completed, we had to make use of them for some of the more urgent cases. I remember one of these very vividly still. I had received a message from a trader saying that one of his Native employees was ill at a distant store apparently with malaria, and asking me to send him some quinine. Next day, another message came saying that the man was believed to have syphilis and then, two days later, yet another message that the man was very ill indeed and would I go to see him at once. The store at which he worked was twenty miles away over a rough and broken road, and it was late in the afternoon before I got there. To my horror, I discovered that the man was suffering from a strangulated hernia and had been ill for nearly a week. His employer, receiving a report that the man had a swelling in his genital organs, had assumed, as so many other ill-informed people do, that anything of that kind in a Native meant syphilis, and that there was no urgency about it. I got the man lifted into my car and set off back to the hospital, trying to go as carefully as possible over the many bumps and stones in the road. Before we got half-way to the hospital the hernia burst. The smell was awful and the rest of the drive to the hospital a nightmare.

We reached the hospital after dark, and we had no electric light at that time. Fortunately, my sister, a trained nurse, was staying with us, and was glad to help us. We hurriedly prepared a room in our new building as a theatre, my wife acted as anaesthetist, one of our newly arrived probationers held a petrol lamp for us, and we tried to do what we could, but it was of no avail and the man died before morning.

It was a very different story recently when the police sergeant rang me up one Sunday afternoon to say that his cook boy had been taken ill, and had a severe pain in the abdomen and a hard swelling between the legs. I went at once and brought him to hospital. One of our senior probationer nurses, a Shangaan girl, prepared the theatre. My present assistant, Dr. Taylor, gave a spinal anaesthetic and then assisted me with the operation, and the patient made a quick and uneventful recovery.

There is always the tendency among primitive people, full of fears and superstition, to wait too long before summoning the doctor's help but, fortunately, not all our cases had such disastrous endings as the one I have just described. Often it takes a long time to get a message to the

doctor, and even then he may be out and unable to come, but in spite of all the difficulties, we are often able to bring help to patients in time of need. The difficulties are well illustrated by the following case. Late one afternoon, I got a message from a woman living twenty-five miles away, saying that her husband had been bitten by a snake and would I come at once. I had been out all day and was tired and hungry. What was I to do? If the snake was really a poisonous one the man was probably dead already, and, if it were not poisonous, he did not need my attention, but I knew the fear and anxiety they would be feeling and decided to go. I had not gone five miles when I had a puncture and had to change a wheel, consequently, most of the journey had to be done in the dark. I was just congratulating myself on being nearly at my destination when we came to a patch of deep sand. In the dark I could not see the best way through and, suddenly, I felt the wheels skid into the sand and there we were stuck. It was soon evident that there was no hope of getting out until next morning, so off I set to walk to my patient. I found him alive but in considerable pain and, of course, he and his wife and family were in great fear of what would happen. I gave him an injection of anti-venene, which gave everyone new hope, and then I went outside, put my coat on the ground and tried to sleep. Next morning, we got a team of oxen, and after much shouting and heaving and straining, we at last got the car out and away home.

On another occasion, I was about to leave for Pretoria where I had promised to address the missionary meeting of the Presbyterian General Assembly. My bags were packed and the car was ready. I was looking forward to a few days in town again. Just as I was saying good-bye, I saw a little donkey cart coming slowly up the drive. In it was a boy about ten years old. He had been jumping across a stream from stone to stone and had fallen and broken his leg. It was a compound fracture. His father bound it up as well as he could and hoped for the best. In a day or two he saw that it was not doing well, and he decided to bring the boy to hospital, a journey which took another two days. We got the little chap inside and once we got the bandages and splints removed, we found that the wound was severely infected and gangrene was setting in. That meant that amputation was the only hope, but the old father would not consent to that. He had brought the boy to be treated, not to have his leg cut off. Surely, the doctor had medicines to make broken bones heal! Other people broke their legs and didn't have to lose them. For over two hours I sat and reasoned with him until, reluctantly, his opposition gave way and he agreed to let me do what I liked.

Only this last week we have had a somewhat similar case. A young boy was bathing in the river and was caught by a crocodile. How he got away I cannot quite make out, but, presumably, his companions managed to scare the beast into letting him go. The poor boy's foot was almost severed and was hanging by a piece of skin only. The father tried to tie it on with a piece of string and then brought him to us but, once again, it took two days to get here. Wild animal bites are always horribly septic things and a crocodile bite is particularly so. Once again, amputation

was the only course open to us, and the father realised that and agreed. We took the leg off below the knee but two days later, owing to infection and secondary haemorrhage, we had to amputate through the thigh.

There are not many wild animals left in the district now and crocodiles are by far the most to be feared. We have had a number of cases of people being bitten by them and coming to hospital with severe injuries, but this is the first time we have had to amputate a limb on that account. Sometimes, also, we get patients who have been bitten by lions. One was an old woman who woke up one night to find that a lion had her by the leg and was pulling her out of her hut. She screamed and threw her blanket over the brute's head and that scared him so that he dropped her and made off. These bites are always heavily infected and heal slowly, but the new sulphonilamide drugs are proving of great value in their treatment.

It is not only Natives who need our help. There are not many Europeans in the area, but those who do live here sometimes require medical care. One such was an Irishman, a stock inspector, who had charge of one of the most malarial parts of the whole area. I got a note from him one day asking me to come to see him as he had fever very badly, and there was no one to help him. I found him in his mule cart driving to meet me. He was quite sure that he had malaria, but one or two things he told me made me suspicious, and I got him to lie down at the roadside while I examined him. It did not take long to realise that he was suffering from a severe attack of appendicitis and I bundled him into the car and set off for the hospital. Then I had to consider the best course to follow. After driving for several miles, I decided to continue straight through to Elim Hospital and not go back to my own hospital. I was able to send a note to my wife explaining my plans and, when we got to Sibasa, I telephoned to Elim and asked them to prepare the operating theatre. The drive that night was one of the worst I have ever known. The patient sat beside me groaning from time to time. My mind was full of forebodings as to what might happen to him, and driving was none too easy. However, we reached Elim safely, and at midnight Dr. Rosset operated on the patient, who made a good recovery.

A year later, the same man was not so fortunate. He was again in the same area and sent for me. This time he had blackwater fever. It is always dangerous to move a patient suffering from this disease, but I could not leave the man lying out in the bush with only a raw Native to attend to him so, once again, I took him in my car to hospital. There we cared for him and nursed him for nearly two weeks, but in the end he died. I remember him saying to me one day : " If I reported a beast dying of anthrax in this area, there would be inspectors sent from Pretoria and no end of a fuss, but if I die of blackwater fever no one will care a straw about it." I could not but sympathise with him, for it often seems true in South Africa that we are more concerned over the welfare of the cattle than we are for that of the people.

It is easy to write of these more or less dramatic incidents in the life of a country doctor, but it is not so easy to tell of the common routine work

that goes on every day. In this area, for example, practically everyone suffers from malaria at some time or other during the year, and no one knows how much the children suffer on this account. In some parts of the district almost every child I see has an enlarged spleen due to malaria. Mothers come with these children explaining that the child does not want to play like other children, and becomes very feverish and thirsty, and cries with headache. A course of quinine will soon make a wonderful difference to the child, but for every one that comes to me, there are probably ten or more who go untreated. Bilharzia is another widespread disease, contracted by bathing in the rivers, and only a small number of those who suffer from it are ever treated. Eye diseases are common and children especially suffer from repeated attacks of conjunctivitis. Eye drops for this condition are perhaps the medicine which we distribute more than any other. In many cases the repeated attacks of conjunctivitis result in a contraction of the upper lid which causes the eye lashes to turn inwards and rub against the eye itself, giving rise to intense irritation and eventual blindness. Fortunately, this can be relieved by a simple operation in which a graft of mucous membrane from the lower lip is placed below the eyelashes to lift them clear from the eye. By this means, many patients have been relieved of their suffering and saved from total blindness.

CHAPTER IV.

TRAINING NATIVE NURSES.

With the completion of the hospital building, we began a new venture —the training of Native girls as nurses. It was quite evident that we should not be able to staff the hospital with trained nurses, and that we could not hope to carry on its work successfully unless we could teach some of the Native girls to help us. We were able to secure the services of one Native nurse who had been trained at the Victoria Hospital, Lovedale, and who did excellent work during the eight months that she remained with us. Our greatest difficulty was to obtain local girls with sufficient education to be able to profit by the training. We decided to make Standard VI the minimum standard of entrance for training, but we were unable to find a single Venda girl who had passed this standard. Eventually, we got one Venda girl who had passed Standard V, one Shangaan girl and two Suto girls from near Pietersburg. We were very fortunate in those first four probationers. They were all good girls, amenable to discipline and ready to develop a sense of pride in their work and in their hospital. The Shangaan gave up after one year, and decided to take up teaching instead of nursing, but the other three remained with us for three years.

One of these girls came to us a day or two before I brought in the patient with a strangulated hernia, of whom I have already written. We were very short-handed, and she had to hold the petrol lamp for us while we worked. It was a terrifying experience for her, and next day she begged me to let her go home. She said that she had not realised what nursing would mean, and that she could not go on with it. For several nights she could not sleep and I had to give her something to soothe her. I wrote to her father about her going home and he replied urging her to make the effort to remain, and this she eventually did. By the time she completed her training, she had become one of our best nurses, reliable, kind to her patients, and a very willing worker.

We had some strange experiences with some of the girls who came for training in the first few years. One of them was evidently afraid to ask us to let her go home, so she wrote asking her parents to come and take her away, and told them that we had kept her locked up all night in a room with a dead body. As soon as I found out that she had invented this story in order to achieve her purpose, she was sent home without any delay.

Night duty was a dreadful trial at first. The nurses disliked it, and it is still, I think, the most unpopular duty. Many a time my wife and I would get up during the night to pay a surprise visit to the hospital to make sure that all was well. We found one girl who had hurried round to see that all the patients were asleep and then locked herself into the kitchen, put a blanket over the window and settled to sleep on the floor. Needless to say, she did not complete her course of training.

Yet, in spite of all the difficulties and discouragements, we have been able to train a growing number of young women as nurses. Last year we had twelve in training and this year we expect to have fourteen. Seven Venda girls have completed their three years' training, and six of these are now at work in the district. The seventh is married and has two children, who demand most of her time and attention. This is something of which we can feel proud for, even now, there is not a single Venda woman who has completed a teachers' training course, and in all the schools in this area there is not one certificated Venda female teacher.

One of the greatest single factors hindering the progress of the Venda people today is their reluctance to allow the girls to be educated. In all the schools in Vendaland, boys outnumber girls by, at least, ten to one. The number of girls who succeed in passing Standard VI is almost negligible. Not only are the girls denied the opportunity of going to school, but when they reach the age of puberty they have to attend the *Domba*, or initiation school, from which they emerge hardened, coarsened and degraded. Much of the difficulty we experience in our work is due to the ignorance, superstition and fear of the women folk. It has been said very truly that if you educate a man, you educate an individual; if you educate a woman, you educate a family. The uplifting of the people of Vendaland will come only when we are able to bring enlightenment to the homes and families through the women.

Only a few days ago, I was stopped on the road by an old man and asked to see a sick child. The child had been sick for many months and the father was away in town. The mother had gone to the Additional Native Commissioner to ask him to try to have the father brought home, and he had told her to get the doctor to see the child and report on its condition. The poor child was in a miserable state, fearfully thin—just a bag of skin and bones. I had been passing within a few yards of that kraal every week, yet the mother had made no attempt to get me to see the child. It was not fear of payment, for she had money. I promised to call on my way back and take the child to hospital, but when I did so, both mother and child had disappeared and could not be found. In cases like these the Native nurse can do much to remove the mother's fear and gain her confidence.

We are not yet able to give our nurses the full training which would enable them to take the Medical Council's certificate. We give them a simpler training, with special emphasis on the common ailments in this area, and give them a hospital certificate when they have completed three years here. Then we send them out into the district to work among the people, and they have certainly been the means of increasing the effectiveness of our work in recent years.

I am often asked whether Native girls are able to make good nurses and take full responsibility. In reply to that, I can say that I have had splendid service from some of them. For over twelve months, from March 1941 to April 1942, we had no European matron for the hospital, and I ran it with the help of two Native nurses, one Mrs. C. B. Nodada who had been trained at the McCord Hospital, Durban, and the other, Edna Molaba,

who had been at the Crown Mines' Hospital, Johannesburg. These two young women carried on in the most praiseworthy fashion, and I had full confidence in their work. They do find the training of others very difficult, but I have no doubt they will develop in that direction also. This year, for the first time, we are keeping one of the nurses we have trained ourselves as a staff nurse. She has shown real ability and efficiency as a theatre nurse, and we believe she will prove most useful to us in that way.

CHAPTER V.

I BECOME A DISTRICT SURGEON.

In 1934, I was appointed Additional District Surgeon at Sibasa by the Public Health Department. Up to that time, there had been only one District Surgeon stationed in Louis Trichardt for the whole of the Zoutpansberg, with a population of nearly a quarter-of-a-million people. As district surgeon, it became my duty to attend the members of the South African Police stationed at Sibasa, to attend pauper cases, to do medico-legal work, and to arrange for public vaccinations throughout the area. Fortunately, for me, the Bavenda are a fairly orderly people, and there is not much serious crime amongst them for whenever a murder is committed, I have to visit the scene of the crime and examine the body of the deceased. Every now and then, this results in one's getting a glimpse of the savage cruelty and evil which still prevail. Very often, no adequate explanation is forthcoming of what has occurred and one can merely guess at the underlying motive. One of the earliest cases I remember was of a man who had been bound hand and foot with reims drawn so tightly that they had broken the skin in many places. He was released and brought to hospital, where he died a few days later from tetanus. In yet another case a man, enraged by the noise of some children playing, seized a little girl about four years' old, slipped a reim round her neck and held her suspended by this for several seconds. He then let her drop to the ground and, while she lay there unconscious, he struck her with an axe. Fortunately, she recovered and seemed none the worse for her terrifying experience.

Very often, a long and wearisome journey has to be undertaken to reach the scene of a crime. In most cases, the motor car can go only part of the distance and then the rest must be done on foot or, occasionally, on horseback. Many a weary day have I spent trudging through the mountains to do a post mortem examination, and many a time have I wished that the judge and jury who would try the case could be made to accompany me on that journey. They would then realise the difficulty with which the evidence put before them is often obtained.

In very many of these cases, the real cause of the crime is belief in witchcraft. Just a year ago, the police sent for me to go to a kraal right in the heart of the mountains, where a murder had been committed. We had two women medical students spending their vacation with us and, as they were anxious to see as much as possible, they volunteered to come with me. We went part of the way by car and then had to walk. Our guide led us down the side of a deep valley and then up a steep hillside. It was a broiling hot day in January and before we got to the top we were all feeling a bit puffed, but we had to trudge on a long way yet. After walking for over two hours, we at last reached the kraal, where we found that an old woman had been accused of witchcraft and, in despair, had hanged herself. Her son, coming home later, and finding his mother

dead, attacked and killed the man who had accused her. He then attempted to kill himself but failed, and so went and reported himself to the local induna, who sent for the police. We had passed him on his way to the police station as we set out on our journey. I examined the two bodies, made notes for my report, and then we set out to return to the car. We wondered if we should ever get back, and the last climb out of the valley was as hard work as any I have ever done. Personally, I could just manage to struggle from one patch of shade to the next, and then sit and rest for a few minutes before going on. However, we finally got back to the car and the thermos flasks and lunch baskets, and never did tea taste so good as those first cups. Next morning, the police telephoned for me again as the accused had strangled himself in the cells during the night.

Another dreadful case was that of a man who had lost two children, and believed that their death had been caused by witchcraft. He suspected his mother-in-law of being the witch and visited her hut one night, attacked her with an axe and brutally murdered her. A small girl who was living in the same hut was also severely injured, and was brought to hospital, where she died a few days later. As she was the only witness to the crime, the accused was discharged for lack of evidence.

In some cases, it is almost certain that foul play has occurred, but no evidence whatever can be obtained. I remember one of the chiefs sent for me once to attend a man who had been burnt. The man was unconscious, and never have I seen such awful burns. The whole of the front of his body and legs were burnt and some parts were charred down to the bones. It was alleged that he had fallen into a fire and burnt himself, but no evidence could be found that he had been drinking, or that he had been subject to fits. It was whispered among the people that he had been deliberately burnt, but no one could bring any definite evidence. He died without regaining consciousness and an inquest was held, but threw no light on the circumstances of his death.

In other cases, injury has been inflicted in an attempt to cure disease. There was, for instance, the case of the young woman, who apparently suffered from malaria. Afterwards her parents said that she had complained of attacks of shivering followed by sweating. A local medicine man was called in and declared that he would drive out the snake which was making her shiver. He ordered a hole to be dug in the ground and in this he placed a pot of water. Round it he erected some poles which he covered with blankets, making a sort of tent. The patient was then made to sit under this tent close to the pot of water and with her legs on either side of it. A fire was made outside in which a number of stones were made red hot, and these were transferred one by one to the pot of water inside the tent, which became rapidly filled with steam. The young woman bore the pain of the scalding steam as long as she could, but at last it became unbearable and she rushed out of the tent and flung herself into the river nearby in an attempt to obtain relief from the terrible burns she had received. A few hours later she died, and next day the police sent for me to examine the body, which was covered with burns from the face right down to the knees.

One of the commonest crimes in the olden days was twin murder, but I am glad to say this has almost disappeared in recent years. Like most Bantu tribes, the Bavenda regard the birth of twins as very unlucky and even disastrous for the tribe. The old custom was for them to be killed immediately by the old grandmother, or attendants. Just before I got to Sibasa, two old women had been arrested and sentenced to death for such a crime. I remember one official at that time declaring that the only way to put a stop to this practice would be to hold a public execution in the district, but I am glad to say that milder measures have been successful in bringing this custom to an end.

Soon after my arrival in the district, I agreed with the Commissioner that I would visit any woman who was reported to have given birth to twins and, if possible, take the mother and babies to hospital for a time, until she learnt to manage them. Very often, even if the babies were not killed outright, no one would help the unfortunate mother with them, and they simply died of neglect. We brought several mothers to hospital and kept in touch with them afterwards and, in a number of instances, I know of twins who have grown into fine healthy children.

We had to keep alert in the early days, of course. Once I was on my way home from Louis Trichardt, where I had been attending Circuit Court, when I got word that the Commissioner wanted to see me. He told me that a certain chief had come to report that " the roof of his house had fallen in," or in other words, that one of his wives had given birth to twins. He said that both babies were dead and by Native custom they must be buried that night. The Commissioner, however, wanted me to make sure that there had been no foul play and that they really had been born dead. I had no instruments with me and I could not get back with them before dark, so the examination had to be postponed till next day. Early next morning, I arrived at the chief's kraal and was shown the hut where the babies had been left. When my eyes grew accustomed to the darkness, I saw to my amazement that one baby was very much alive. The other had been born in a caul and was dead. Of course, it might have been saved had anyone quickly released it from the caul, but I felt justified in reporting that it had been born dead. I took the chief back with me to the Commissioner, for I was reasonably certain that if I had not been sent to investigate, both the babies would have been buried the previous night. The mother and the surviving baby were brought to hospital, and the little one was soon making good progress.

At the end of 1937 and the beginning of 1938, there was an outbreak of smallpox in the district, and I had, as District Surgeon, to organize mass vaccinations throughout the area. Usually, this meant being out for one or two days a week. The procedure adopted was to send word by the police that I would be in a certain place on a certain day to vaccinate. When I arrived, there were literally hundreds of people waiting for me, and I had to have the help of the police to get them into line, and to maintain order.

The most important result of my appointment as District Surgeon was that in 1937 I was able to start " Medical Aid " tours throughout the

district. It was quite apparent by that time that it was not enough simply to have a doctor stationed at a hospital in the heart of the district. There were many thousands of people living at such distances from the hospital that it was doubtful whether they could ever make use of the doctor's services. It was decided, therefore, that the doctor should make regular tours throughout the area, and the Public Health Department agreed to subsidise these tours on a mileage basis. Six of these tours were at first authorised, three to be undertaken once a month, and three once in four months. Clearly, this was a very inadequate and unsatisfactory provision for the needs of this district. I have learnt, however, not to despise small beginnings, for I have often seen them grow into greater things.

The results of my tours were also very disappointing at first. I would send word in advance of my intended visit to chiefs, teachers and storekeepers, asking them to make it widely known amongst the people. On the appointed day, I would arrive at the selected centre hoping to find a large number of people waiting for me, and perhaps there would be only a few old men wanting a medical certificate to enable them to apply for exemption from taxation. We had also to find out by experience which centres not only needed these visits, but would show the greatest response to them. In course of time, we have developed twelve stations, each of which is visited once a fortnight. At each of these I usually find anything from twenty to thirty patients waiting for me, and as I visit two or three places in one day, I may have to see anything from sixty to eighty people in the course of a day's tour.

At one place where I was anxious to begin work, I called a meeting of the chief and his headmen and councillors and people, so that I might explain to them the purpose of my visits, and urge them to make use of the services which were to be provided. When I had finished speaking myself, a local storekeeper asked permission to address the crowd. He advised them not to be afraid of the hospital, for, he said : " I was a man with two heads, and I went to the hospital and the doctor took one head away, and now you see I am as other men are." He had had a large sebaceous cyst on his head, which had been removed in the hospital.

CHAPTER VI.

THE DEVELOPMENT OF THE HOSPITAL.

Following the opening of the hospital in August 1934, each year saw fresh developments. In 1935 we built a nurses' home, which consisted of a dormitory, a night nurses' bedroom, a classroom, bathroom and lavatory. Until then, our nurses had been housed in a rondavel. In the same year we were able to build a kitchen and laundry. The first kitchen had been a small room opening directly into the main ward. Towards the end of the year, we also received a wonderful gift of hospital equipment and linen from the Premier Mine Hospital, near Pretoria. This hospital was to be closed, and our good friend, Rev. Dr. E. Macmillan, of Pretoria, was able to interest Sir Ernest Oppenheimer in our small, struggling hospital in the north, with the result that equipment valued at over £200 was sent up to us. The linen is all worn out now, but the anaesthetic table, the instrument table, and the patients' trolley, are still in almost daily use, and I do not know how we should manage without them. The gift of this equipment was accompanied by a cheque for £100 from Sir Ernest, and this enabled us to instal a small electric lighting plant, which was an inestimable boon to the hospital and the cause of much interest and delight to our nurses and all our neighbours round about. Water-borne sewerage was also installed in that year. In 1937, we were able, through the generosity of Lord Maclay, of Duchal, Scotland to add a four-roomed cottage for the accommodation of our European staff. By that time, my sister, Miss W. G. Aitken, had come to join us as matron of the hospital, and to give us the trained help we so badly needed in the running of the hospital, the operating, and the training of the nurses. My mother was also sharing in the work by holding Bible classes for the nurses and running a Sunday School in connection with the Church.

At the end of 1937, my wife and I had completed five years service at Sibasa, and we were due to go on furlough to Scotland. We left early in 1938, and during our absence the work was left in the hands of Dr. W. O. Petrie, who was sent out specially from Scotland to relieve us. During those five years, we had at least laid the foundation on which a more adequate medical service could be built, and we had completed our small hospital, in which by this time we had twenty-four beds, with all the other buildings I have mentioned, at a total cost of about £5,000.

On my return from Scotland in 1939, I found that an epidemic of tropical ulcers had broken out and spread all over the district. The hospital was full of patients suffering from these ulcers and on my district tours I was constantly coming across similar cases. This tropical ulcer affects, principally, young people, and is most common on the lower part of the leg, although I have seen it on almost any part of the body. It apparently starts from a small scratch, or wound, possibly even from a mosquito bite. The wound does not heal and slowly enlarges, destroying the

surrounding tissues until a deep ulcer filled with a foul-smelling slough is formed. The ulcer does not seem to be very painful at first, and so the Native people are apt to neglect it, until it becomes very large and the smell almost unbearable. Curiously enough, I had not seen any cases of this condition up to 1938 when I left for Scotland. Older Natives told me that they remembered a time long ago when similar sores had been prevalent, but they were emphatic that they had not been known in the district for very many years.

The problem we had to face was to find some method of treating these ulcers. At first, we applied various antiseptic solutions, changed several times daily, but we found these took several weeks to produce any marked improvement. Meanwhile, the smell of all those ulcers was almost enough to drive one out of the hospital. The dressings were not changed during the night, and a visit to the out-patient room when the first dressings were being done in the morning was something to be avoided, if at all possible. Obviously, some more drastic measures were needed, and I began to try other methods of treatment. At first, I applied strong caustics, such as carbolic acid and formalin. These checked the ulceration and got rid of the smell, but formed a hard scab over the surface, and under this the infection soon began again. Then I decided to scrape the ulcer, after giving the patient a general anaesthetic, and this was so effective that it became our routine treatment for a long time. As soon as a patient with an ulcer was admitted, he was prepared for operation, and given a general anaesthetic and the ulcer thoroughly scraped, until only healthy tissue was left. It was amazing to see the change this made. The next day the ulcer was clean and dry and the foul odour had completely disappeared. Within a short time it had begun to heal, and in the case of very large ulcers, we were able to shorten the period required for healing by covering the raw area with skin grafts. By this means, we were able to reduce the time required for healing very considerably, and the news was spread through the district that our hospital was successfully treating these ulcers. As a result, the numbers coming to hospital began to increase steadily, and it was apparent that more accommodation would have to be provided. Fortunately, a grant was available from the Native Affairs Department, and we were able to begin work on a new female ward, which was later to become our maternity ward.

After a year or two, the epidemic of tropical ulcers began to subside, and we were able to develop less drastic methods of treatment. We found, for example, that if the ulcers were not too big, they would heal quickly and readily if they were covered with boriodoform powder and elastoplast, and we were able to treat many cases as out-patients in this way, instead of admitting them to hospital. While the epidemic was at its height, however, it produced some disastrous results. I remember two cases in which almost the whole of the leg below the knee had been entirely rotted away, so that the muscles of the leg were hanging in shreds around the bone. Both these patients died. In yet another case, the whole of the shin bone was infected, and I had to remove pieces of dead bone over six inches long from the leg. After many months in hospital,

that patient recovered, and is now able to walk about on both legs quite normally.

The Shangaan people who live in this area practise the rite of circumcision, and nearly every winter large circumcision schools are held. Boys and men flock to these schools from all over the district, and whenever such a school is in progress, you may see long lines of young men and boys wending their way along the road towards it. In 1939, a number of these schools was held as usual, but, unfortunately for the initiates, the organisms associated with tropical ulcers gained admission to their wounds with most dreadful results. Matters became so bad that the chiefs had to report the occurrence to the Native Commissioner, who promptly ordered the schools to be closed and arranged for many of the sufferers to be taken to hospital. Forty-three were admitted to our hospital and well over one hundred to Elim Hospital. Unfortunately, a most distorted account of this occurrence got publicity in the press, and it was made to appear as though an orgy of cruelty had occurred, in which many men and boys had been deliberately and shamefully mutilated. However, this led to the appointment of a Departmental Committee to enquire into the conduct of these circumcision schools, and one result of this was that, a few months later, I was able to extend my medical aid tours to those parts of the district inhabited principally by the Shangaan people. These locations had until then been practically beyond the reach of all medical aid, and the people there very soon showed their appreciation of the help now extended to them. These new tours helped to spread the knowledge of the hospital more widely and led to still larger numbers seeking admission, and in 1941 we had again to extend, and add yet another ward. At the same time, we took the opportunity to build a new nurses' home, for it was becoming apparent that we should soon have to increase the number of nurses in training very considerably. These new buildings were formally opened by Mr. H. G. Lawrence, the Minister for Public Health, in November 1941. The following year, 1942, we added a new electric lighting plant, the original one being too small to supply our needs any longer, and a most useful portable X-ray plant.

This rapid development, from a hospital with twelve beds in 1934 to one with fifty beds in 1941, was most encouraging as an indication of the way in which the hospital was increasingly meeting the needs of the people, but it brought many problems and difficulties with it. One of the earliest we had to face was that of securing an adequate water supply. That was solved by the installation of an hydraulic ram, but as time went on, more water was needed, and first one and then another ram had to be added. The three rams which we have installed now are capable of supplying over 5,000 gallons of water daily to the hospital. The water, as it comes from the river, is very dirty and after any heavy rain it is simply thick with red mud. We have, therefore, to run it into settling tanks and add alum to it to clarify it.

Electric light is an enormous boon as long as the engine and generator are working satisfactorily, but when anything goes wrong with either, it

can be a most infernal nuisance. Moreover, when the nearest mechanic and workshop are sixty miles away, help is not easily obtained. Consequently, the doctor has very often to turn mechanic and electrician and do his best to put matters right. It would be difficult to reckon up the number of hours, and days, I have had to spend wrestling with a recalcitrant engine. Very often, just as I had the engine all to pieces and grease and oil all over my hands and arms, and very often my face also, there would be an urgent call to attend a patient, and I would have to leave the job for another time. There was one engine which I took to pieces and repaired so many times, that I felt in the end that I knew its internal anatomy almost better than that of my patients. Fortunately, the plant we have now gives much less trouble, and I have been able to teach two of our Native employees to look after it and make occasional adjustments.

Fuel is another problem. Owing to the prohibitive rates charged by the South African Railways for transporting coal, we are entirely dependent on wood, which we buy from the people round about us. Native women gather dead wood from all over the neighbouring parts of the district and bring it to sell to us. Almost every morning my wife spends a busy hour or two purchasing wood and vegetables from these women, and she has become expert now in assessing the price to be paid for every log offered for sale.

Food for the patients and nurses and ourselves is yet another of our problems. Fruit is, fortunately, plentiful and we have on the station numerous orange and lemon trees, avocado pears, mangoes and pawpaws, many of them planted long before our time by our predecessors, Rev. D. A. and Mrs. McDonald. We have established a new orchard of young fruit trees. We are also able to grow vegetables, but it is often a hard and discouraging task, for never was there such a place for insects of every kind. Beetles, worms, caterpillars, grasshoppers, locusts, are always ready to take their toll of whatever is planted, and these pests destroy many a promising bed of young seedlings.

Meat, milk and butter have always been the cause of many difficulties. At first, we tried getting meat and butter from the butcher in Louis Trichardt, but as it had to come fifty miles in the railway bus and remain overnight at Sibasa until we could collect it, we found this very unsatisfactory. In the summer months especially, the butter had often melted away and the meat was fit only for decent burial. In recent years, a Native butcher has opened a shop about four miles away, and he slaughters a beast once a week, so we are now able to get enough meat from him each week to feed our nurses and patients and workmen. We have always kept a few cows, and some time ago the Native Affairs Department gave us five more. We have had to set to work since then to develop nearly all the small plot of land we occupy as grazing pastures for these cows. Very unwillingly I find myself being compelled to add an interest in farming occupations to my many other duties.

Nothing is more likely to give rise to discontent and trouble in any institution than complaints about the food, and we have had to take a lot of trouble to learn something about the food habits of the people here.

The staple food is, of course, maize porridge, but this is always taken with a relish (*tshisevho*) of some kind. This relish may be meat or thick milk or various forms of vegetables. A favourite vegetable is the male flower of the pumpkin plant, but this is eaten only at certain times of the year. For some reason which we cannot yet appreciate, it is not considered good for eating before Christmas. Actually, it is a very delicious vegetable and we ourselves have grown very fond of it. Ground peanuts are added to the vegetables whenever possible. The people also collect and dry certain vegetables when they are plentiful, and keep these for use when the fresh ones cannot be obtained—a primitive method of dehydration. In spite of the variety of relishes used, the diet is a very monotonous one, but it seems to satisfy, at least, the minimum requirements for health, as I do not see the gross evidences of malnutrition which are apparently so common elsewhere. I have always been interested too in the comparative rarity of many diseases which are responsible for filling so many beds in our large town hospitals. Appendicitis, for example, is very seldom seen and, in eleven years, I have only once had to remove an appendix, and that was from one of our own Native nurses. Peptic ulcer is almost unknown and I have had only one case of diabetes. How far this is connected with the diet, I cannot tell. Cancer is also apparently much less common than in Europeans, but the rarity of cancer of the breast is probably due to breast feeding being universal and prolonged.

Many people are inclined to think of a hospital as consisting simply of wards and an operating theatre, and to overlook the important essentials behind the scenes, such as kitchens, bathrooms, sculleries and laundries. Our own hospital is suffering at present because it has outgrown the capacity of what has been provided in this way. Our kitchen is the same as it was in 1935 when we had to provide for two hundred patients, although last year we had six hundred. Our laundry has become hopelessly inadequate, and there is no room for drying clothes in wet weather. If we have rain for several days in succession, as we very often do, the hospital is festooned with sheets, towels, swabs, and napkins, hung up to dry. We are still dependent, too, on primus stoves for most of our sterilising, and they are a constant source of worry and irritation, especially now that spare parts and new stoves are becoming so difficult to obtain.

CHAPTER VII.

MOTHERS AND BABIES.

There is a commonly held belief in South Africa that Native women suffer very little in child birth, and require very little help or attention at that time beyond what can be given by the mother or other female relative. My own experience has been that while birth is usually a natural and normal process in the majority of Native women, there are many cases of severe and often needless suffering, leading to serious deformities and even death. It is impossible to tell at present how many women die in childbirth, (or from any other cause), because there is no registration of births and deaths in any Native reserve. I do know that every now and again people come to the hospital bringing babies whose mothers have died, and asking us to care for them. Usually several days have elapsed since the mother's death, and the unfortunate infant reaches hospital in a semi-starved condition. It takes weeks of patient feeding and nursing to get these babies back to normal, and most of them owe their lives to the care and skill of our hospital matrons, past and present. There are some in hospital still whom I expected to die within a few days, but who eventually began to recover and regain weight.

One of the first of these infants we had in hospital was taken to one of our district nurses, who cared for her for several days until I arrived on my fortnightly visit, when I brought her back to hospital. The father was a rather queer old fellow who was evidently very fond of the child, for he often came to see her and willingly paid the small charges we made for her to stay in the hospital. When she was about a year old, he decided to take her home again, and he arrived one day resplendent in a tail coat and top hat to claim his daughter.

On another occasion, I was sent for by a very noted old witch-doctor, and asked to undertake the care of his twin grandchildren, whose mother had died. I brought them back to hospital and they are now fine, healthy babies, almost ready to go back to the care of their aunt, who takes a great interest in them. We have seven of these infants in hospital at present, and they require plenty of attention.

The staff and nurses become so attached to these youngsters, when they remain in hospital for long periods, that they often protest very much at their being sent home. Provided that there is a sensible woman to take charge of the child, however, there is really no reason why they should not go as soon as they are well established and able to take the ordinary food provided in their homes. One or two have died after going home, but most of them have got on well and, of course, they are no more immune from sickness and death than any other patient discharged from hospital.

When a woman goes into labour, she is usually taken into a hut by the older women and must remain there until the birth is over and for some time afterwards. I have often been surprised at the ignorance and

incapacity of these old Native midwives, whose mismanagement of the case frequently leads to complications. The woman is made to lie down and is encouraged and urged to use all her strength to bear down with every pain. If there is no obstruction, all may go well and the delivery be completed in a reasonable time. If there is anything to cause delay, this procedure tends very quickly to make matters worse. The unfortunate woman soon becomes exhausted. She is not allowed to have anything to drink. It might drown the baby. This exhaustion, often accompanied by panic, may itself lead to further delay. Only this morning, I was wakened in the early hours and asked to go and see a woman who "couldn't get a baby." She was a young, normal woman who had been in labour all day. I had taken a stretcher with me and was able to have her carried to hospital. In these cases, it is useless for me to send a message for the patient to be brought. I have to go myself and often do a little bullying to get the people to carry the patient to the car or to hospital. Once I got this patient to hospital I was able to make her more comfortable, and a thorough examination convinced me that she could deliver herself in good time. I gave her a sedative, told the nurses to keep her quiet, and two hours later she gave birth to a fine boy.

When labour is unduly prolonged for any reason, consternation soon begins to grow. The unfortunate patient is accused of having been unfaithful to her husband. She is urged to confess the name of her lover, and clumsy attempts to hasten the delivery are made by pushing and pressing on the abdomen. The husband is, as a rule, kept in ignorance of what is taking place, but when it eventually becomes apparent that all efforts to deliver the woman have failed, he is informed, and he may then come or send to hospital for help. Very often, this decision is not reached until four or five days have passed. By that time, the baby is certainly dead and the mother's life in grave danger. Only a few weeks ago, Dr. Taylor went to attend such a case. He had to travel nearly forty miles to the patient's home, and she died soon after his arrival.

It is amazing what some of these women can stand. If there is any possibility of doing so, I try to get them into hospital, as it is almost hopeless to attempt any operative treatment in the kraals, and often impossible to arrange for the after care which makes all the difference between life and death. I have had cases where women have been in labour for several days and have been transported to hospital in our motor truck sometimes for a distance of fifty to sixty miles. They have then undergone a serious operation, and yet survived the dreadful ordeal, but very often although life may be saved, they suffer the serious and distressing complication of a bladder fistula. This is a permanent opening in the bladder through which urine constantly dribbles away. The successful closing of that opening is one of the most difficult tasks of surgery.

After such an experience, a woman usually comes back to the hospital if she again becomes pregnant, but some are very slow to learn. Some years ago a teacher's wife came to me. She had a history of two previous pregnancies. In the first, she had remained at home for several days, and then been taken to a hospital and delivered of a dead baby. In the second

she went to hospital, was allowed to go into labour and delivered by means of instruments, once again of a dead baby. For the third pregnancy, she came to the Donald Fraser Hospital, and I delivered her by Cæsarean section of a living child. Husband and wife were delighted, and very grateful. Yet only this year, being pregnant again, she waited at home, and then went elsewhere and again lost her baby.

There is always a peculiar pleasure in being able to help a woman who has suffered greatly in previous labours, and who has not had a living child. One patient came to us some years ago, and we delivered her with the help of forceps of a baby, which lived only a short time. She went away to town, and I lost sight of her, but heard later that she had had a similar experience in another hospital. For the third pregnancy she came back to us, and I decided to do a Cæsarean section. I gave orders that I was to be called as soon as she went into labour, and at 5.0 a.m. one Saturday the nurse on duty came for me and was told to prepare the theatre. To my dismay, when I got up, I found I could scarcely stand. My eyes would not focus, and I felt as if everything was swimming round me. I persisted in trying to dress, but found I was getting worse. After an hour or two, I was no better, and finally my wife had to telephone to Elim Hospital and ask for help. Dr. Spencer and his wife very kindly came out immediately. By the time they arrived I was feeling better, though still shaky, and with his assistance, I was able to operate, and I am glad to say to deliver a live baby, who is now growing into a very bonny child.

One of the most hopeful and encouraging developments in our work in recent years has been the increasing number of women who come, entirely of their own accord, to be confined in hospital. In 1939 we attended only eighteen confinements, whereas last year the number was one hundred and four. Many of these women meet me when I am on tour and ask to be brought to hospital. In this connection, I often get amusing letters from anxious husbands. One man sent his wife with a note saying that she was " impregnant," and that he wished her to be treated in " a more advanced way." Another, whose wife had been very ill during one stage of her pregnancy wrote to enquire about his " beloved girl," and when he was assured of her improvement, he replied expressing his delight and added : " in humiliation with these few lines I let you know that even seeing that she is now better, she must remain in hospital until her generation is well completed, that is to say, after next month she may be released."

Our great hope is that in the near future, we may be able to have the hospital registered with the Medical Council as a training school for Native midwives. At present, there are only six hospitals in the Union undertaking the training of non-European midwives, and we are most anxious to add to their number. If this dream can be realised, and we are able to send out each year, even a few well qualified midwives into the district, we shall have taken a great step forward towards promoting the welfare of the women of this district.

CHAPTER VIII.

THE BLIND, THE LAME AND THE POSSESSED.

My purpose in writing this book is to try to give my readers a picture of the conditions which prevail in one of the Native areas in South Africa, particularly in regard to the sickness and suffering of the people living in that district. They may find it difficult to believe that I am writing of a district only three hundred miles from Johannesburg. In happier days, when petrol and tyre restrictions were unknown, it was possible to leave Johannesburg in the morning by car and arrive at Sibasa the same evening. Many South Africans and others have passed through part of this district on their way to or from Punda Maria, at the northern end of the Kruger National Park. Yet probably very few of these give any thought to the human suffering and sickness which prevail in the Native villages, which they see as they pass swiftly on their way. Perhaps I can give some idea of this if I tell now of some of the patients we have in hospital and of others whom I see on my tours in the district.

I have just finished the evening round of the wards and here are some of the patients whom I saw.

In a corner of the male ward is Andries. His brother came to the hospital some months ago with the story that this man had fallen into a donga and injured himself and could not walk. He wanted me to go and fetch him, but after a few enquiries, I found that it would be quite impossible to get the car anywhere near the kraal, which was right away in the mountains. I suggested that they should carry the patient to the nearest road and then come for me, when I would willingly pick him up. A week or more passed, and late one night the brother came again. He and some friends had made a stretcher and carried Andries as far as a store about a mile away, and wanted me to fetch him from there. I went at once and brought him back with me. The stretcher bearers must have had a most difficult task carrying him many miles across rough, hilly country. The poor fellow has a fractured spine, and is completely paralysed from the waist downwards. Nothing can be done for him except to keep him comfortable by careful nursing. We have had him in hospital now for over two months, and he is wonderfully patient and uncomplaining, although he can see that he is not improving. He may linger on for a few more months, but the end is inevitable. Left in the kraal, his condition must have been pitiable in the extreme, and we are at least able to keep him clean and comfortable.

Not far away from him is Hlamalani, the boy whose leg was bitten by a crocodile. His amputation stump is healing now, and he is making a good recovery. In the next bed is a man who had a small wound in his hand which became infected. When I saw him, the whole hand was greatly swollen and very painful. Infections of this kind are very common here and often lead to serious deformities and crippling. In this case, the hand appears to be healing satisfactorily.

Out on the verandah are two men suffering from consumption. One is a soldier who contracted the disease while on active service in Egypt. He was brought back to the Union, and the Public Health Department asked if we could take him here. Quite evidently, there are nothing like enough beds available for these Native soldiers, for we have repeatedly been asked if we can provide accommodation for such cases. In the course of the last two years we have taken five of these men. Two have died, two have been allowed to return home, and one is still here. The other patient is a teacher, who was admitted apparently suffering from malaria, and in whom we discovered tuberculosis more or less unexpectedly. Fortunately, this is an early case, and he has had the good sense to take our advice and remain in hospital, and we are hopeful that the disease may be arrested.

Tuberculosis is a terrible scourge to the Native people, and in some districts it is wiping out whole families year by year. Fortunately, it occurs less frequently here than it does further south, but I suspect that it is on the increase here also. There are three cases of tuberculosis of the spine in hospital just now. Two of them are fairly young children, one a boy and one a girl. They have been in hospital for over a year now, and must stay for at least another year. It is very difficult indeed to persuade Native parents to leave their children in hospital for such long periods, and these are the first two cases we have been able to treat in this way. I must confess that I have often had to be very stern with the father of one, who has come repeatedly to beg to be allowed to take his boy home. The third case is a man, and I am afraid there is little hope of any improvement in him. He came to me some years ago with a very badly diseased wrist, and I advised him to let me amputate his hand. Some weeks ago I found him lying by the roadside waiting for me to pass. His relatives had brought him there knowing that I was due to come that way that afternoon, and then left him. He is completely paralysed below the waist, and we can do little more than keep him clean and comfortable. I wonder how many similar cripples and paralytics are dragging out miserable existences hidden away in their kraals with no one to give them the care they need.

In the McDonald ward we have a small boy who fell and sustained a compound fracture near his left elbow. He was kept at home for a few days and then the Manager of the New Union Gold Mines heard about him and kindly sent him to hospital in one of his lorries. Fractures near the elbow are always very liable to become complicated, and in this case the wound was certainly infected. I reduced the fracture and put the arm into plaster, and it is healing slowly. He will have a stiff elbow, of course, but he can use his hand. He is a brave little fellow and we are all very fond of him.

There is not much motor traffic on our roads and so we do not have many fractures to deal with. Those we do get are often fractures of the femur caused by boys falling out of trees or being knocked down by oxen. The people make quite a good splint out of reeds bound together by grass, but they do not realise the need to make it long enough to control the movement of the joints above and below the fracture. Sometimes the

relatives send a message asking for the patient to be brought to hospital in our motor truck, but often they bring him themselves in a small donkey cart. What the patient suffers on the journey is best left to the imagination. I remember one boy whom I went to fetch. He had been knocked down and trodden upon by an ox, and his fibula was broken. He was sitting on the ground outside his hut, and when he saw me approaching him with a long splint in my hand, he began to scream loudly. I could just make out that he didn't want the plank, and then his mother explained that the poor boy imagined that I was about to remove his leg and give him a wooden stump there and then.

Other patients in the McDonald ward are a woman whose arm was seized and bitten by a crocodile, and one whose finger was bitten by her daughter-in-law. The finger became septic and the patient had to come to hospital. These women very often bite one another when they start quarrelling and fighting, and I have seen women with bits of their noses or ears or lips bitten right off. In the female maternity and surgical ward we have several mothers with newly born babies, and three or four expectant mothers. There are two women recovering from abdominal operations and a blind woman who has had a cataract removed from one eye and is waiting for the other eye to be done. Out on the verandah are our seven orphans.

In a ward by herself we have a woman who is suffering from mental disorder. She firmly believes that she has been bewitched by some of her heathen relatives. We really have no facilities for treating such cases here and usually do not admit them, but, knowing her special circumstances, we agreed to do what we could for her. There is a great deal of epilepsy and mental disease amongst these people, and very little provision is made for dealing with it. I am told the mental hospitals are over-full, and I know that it is practically useless to certify anyone as insane. They are sent away for a few weeks and then sent back again, and the relatives are told that they must care for them. At the best, this means keeping them confined in a hut, at the worst keeping them tied up to a tree. People in towns often seem to think that a Native has such numerous relations in and around his own home that there should be no difficulty in caring for him there, but this is by no means always the case. Only recently, an old woman came to complain that her son frequently became violent and assaulted her, and that sometimes she had to sleep out in the bush because she was afraid of him. She had no relatives able or willing to help her.

Epilepsy is a common disease and a very serious handicap to a Native man. The boy or man who suffers from it cannot go away to seek employment, and is often useless at home. Consequently, he is a liability to his people, and it says much for the Native people that these sufferers are as well cared for as they are. The disease is a dangerous one also, and we frequently have patients in hospital suffering from severe burns as a result of falling into a fire during a fit. Sometimes it takes weeks for such burns to heal, even when we are able to hasten the process by means of skin grafts.

It has become an established part of my routine now to spend two days

a week on tour in the district. Each day I visit two or three places at which people gather to see me. For these tours I use a light delivery motor truck with a canvas hood over the back. Into this I pack several baskets containing some of the mixtures and lotions which I have found by experience to be most useful. I take a driver and an orderly with me, and any patients who are ready for discharge and whose homes are along my route for the day, and in the afternoon I bring back new patients, who would otherwise find it difficult to reach hospital. Last year I brought two hundred and eighty patients to hospital in this way, and it is quite a common thing for me to come back with the truck loaded to capacity. My appearance and that of my conveyance is very different from that of the conventional doctor, and I sometimes wish I could provide more comfortable transport, both for the patients and for myself. One day we hope to have a proper ambulance to do the job.

At some of the centres which I visit there are nurses stationed and a small dispensary, but at many of them there are very meagre facilities indeed for my work. At one place I use a classroom in a Swiss Mission school, at another a small thatched hut, and at another an old barn. There is one place where I simply have to put my table and chair under a tree by the roadside and see the patients there. Under such circumstances it is impossible to do as good and thorough work as I should like. Much of it is necessarily very superficial, but it does enable me to find the patients who need treatment in hospital and who very often could not get there if I did not take them back with me. It also enables me to help literally hundreds of patients who can benefit by simple treatment at home. A mother with a large family to care for cannot leave them and trudge thirty or forty miles across country carrying one of the children to the doctor, and consequently, many a youngster with an attack of conjunctivitis, or of enteritis, or with a small ulcer, would go untreated were it not for my fortnightly visits to the neighbourhood. Yet these may quickly lead to serious and even disastrous consequences. It is not easy work, for on a sweltering hot day travelling anything from forty to eighty miles and seeing fifty or sixty, and sometimes more patients is very exhausting. Often I have felt like giving it up, or at least curtailing it, but when I think of those little groups of people all over the district patiently waiting the doctor's arrival, I know that I cannot disappoint them, and must do my best to carry on.

On these trips, too, I see so many of the results of disease which has been neglected through ignorance or simply because of the difficulty of getting to a doctor or hospital. Little children who are completely blind, cripples with deformed and withered limbs, the deaf and the dumb, all come at some time or other in the pathetic but vain hope that something can still be done to repair the damage done by past disease. Only today I saw a girl of about fourteen years who had become completely deaf and dumb since an illness a year ago. I hope and believe that my tours have been the means of saving some, perhaps many, from blindness and other deformities.

CHAPTER IX.

WHAT IT COSTS.

Finance is not a very interesting subject to most of us, but we all know that money is needed for the building and maintenance of hospitals, as well as other institutions, and some may be interested to know just what the work here costs, and where the money comes from to maintain it. In 1942, I prepared a memorandum on our work for the National Health Services Commission, and I went through all our accounts to ascertain how much had been spent in building and equipping this hospital. I found that the total amount had been, approximately, £10,500. This expenditure covered the building and equipping of the hospital itself and its fifty beds, my own house and the European staff quarters, and the Native nurses' home. All these buildings are lighted by electricity and have water-borne sewerage laid on. There is also an X-ray plant in the hospital whose cost is included in the above figure. This means that the hospital has been built at a cost of about £210 per bed. This is a very modest figure when you remember that many hospitals in recent years have cost as much as £1,000 per bed. Of course, our buildings are very simple and we have had to manage with the bare minimum of equipment and furnishing. We would gladly have spent more if we had funds available. At present, we are planning to double the size of the hospital, and we are appealing for £25,000 for this purpose. If we succeed in obtaining this and carry out our plans, the cost of the entire hospital will still be only £350 per bed.

Of this £10,500, nearly £3,000 came from overseas, either directly from the Church of Scotland, or in donations from members of the Church. Approximately, £5,000 came from the Native Affairs Department, £1,100 from the Transvaal Provincial Council, £770 in donations from friends in South Africa and £650 from the Deferred Pay Interest Fund.

Last year, 1943, the actual current expenditure for the maintenance of the hospital was just over £3,000 and this meant that the cost per patient per day was 3s. 9d. Actually, it was a little less than this, as I have made no allowance for the treatment of out-patients. This figure does not, of course, include the cost of travelling on my district surgeon's tours.

In order to meet this expenditure, we have to rely upon various sources for our income. In the first place, we charge our patients a small fee for the treatment they receive in hospital. This fee is one pound per month or one shilling per day for short periods of less than a week. The fee covers operative treatment and, in some cases, X-ray examination. For maternity cases, we also charge one pound irrespective of whether the patient is in hospital for ten days or a month. Out-patients are charged one shilling for an examination and a bottle of medicine. When patients leave hospital, they are each given an account, and it is left to them whether they pay it or not. We have no means of following them up or of pressing them for payment. Yet our figures show that approximately

two-thirds of them do pay their accounts, and I think that is a remarkable evidence of their honesty and appreciation. Last year we treated five hundred and ninety-four patients in the hospital and by the end of the year four hundred of these had paid their accounts, either in full or in part. Of the two hundred who have not paid, some at least will pay during this year. Our total income from patient's fees for the year was £684 13s. 5d.

Apart from this, we depend for our income upon a contribution from the Church of Scotland Mission Funds and on grants from various public bodies. Up to October 1940, the Church of Scotland made its contribution to the maintenance of the hospital by paying the whole of my salary from their Mission Funds. In that year I was called up for service by the Defence Department, but the Secretary for Native Affairs intervened and urged me to remain at my present post. He asked the Defence Department to release me, which they did. I then pointed out that if my work here was regarded as being of value to the country, the Government ought not to depend upon the people of Scotland to pay my salary, especially at a time when Great Britain was bearing the whole brunt of the war, and her people were being mercilessly bombed out of house and home. Indeed, I felt so strongly about this that I was not prepared to continue my work here unless more support was forthcoming from South Africa. As a result of my representations, which were received with the utmost sympathy by the Secretary for Native Affairs, his department made a special grant towards my salary as superintendent of the hospital. Consequently, since October 1940, the Church of Scotland has been relieved of approximately eighty per cent of the contribution it formerly made, but I should like to mention here that in the last ten years nearly £8,000 has been sent from overseas for the establishment and maintenance of this hospital.

The Native Affairs Department has always taken a keen interest in our work, and has made grants for the training of Native nurses in accordance with principles which it laid down in a circular issued in 1929. I shall not go into details in regard to these, but I must pay a warm tribute to the interest and sympathy and practical helpfulness which has been shown towards mission hospitals by the present Secretary for Native Affairs, Mr. D. L. Smit. The Native people owe an immense debt of gratitude to him for all that he has done for them with the limited means at his disposal during his term of office. The grant made to this hospital from this Department last year was £580. Another body from which we receive occasional grants is the Deferred Pay Interest Fund, from which last year we received £375.

The Public Health Department is concerned only with the treatment of cases of infectious diseases and not with general hospitals as such, and they can accordingly assist us only by payment of fees for such cases. They are the only Government department which makes their grants on a patient-day basis, and as a result, we are able to treat all cases of tuberculosis in a communicable form, and all cases of syphilis, entirely free of charge. Their grant in respect of such cases last year amounted to

£164 17s. 6d. but in addition they supplied us with a large quantity of drugs, such as quinine and arsenicals, free of charge, and they also subsidised the salaries of our district nurses. Each of these nurses receives £6 a month, of which the Public Health Department pays £5.

Hospitals are one of the main responsibilities of the Provincial Councils in South Africa, and the Transvaal Provincial Council now makes a grant of £750 per annum. This took effect from the 1st April 1943, so that last year we actually received £687 10s. from this source, just a few pounds more than the amount paid us in fees by the patients themselves. The whole subject of the relationship of Provincial Councils to hospitals is of such importance that I shall leave it for fuller consideration in the next chapter.

Our income from all sources for the year 1943 amounted to £2,745 2s. 3d. and for the two years 1942 and 1943 we have an accumulated deficit of £540 13s. 6d.* My main purpose in presenting these figures in some detail is that I want to discuss the source from which most of our income is ultimately derived. The grant from the Native Affairs Department is made from the Native Trust Funds; formerly it came from the Native Development Fund. The latter was entirely derived from the proceeds of Native taxation, and the Native Trust Fund still depends very largely on this source for its revenue. This grant of £580 is, therefore, derived ultimately from the direct taxation of the Native people themselves.

The Deferred Pay Interest Fund was formed as the result of the system of deferred pay which is voluntarily accepted by many Natives working on the Rand gold mines. Instead of drawing their pay while at work they allow it to accumulate until they are ready to return home. While it accumulates, it draws interest. The amount of interest which should be added to each miner's pay is very small, but the sum total of interest on all the deferred pay is quite considerable. The mines claim that the cost of administration would almost absorb the entire amount of the interest if it were to be paid out to each individual miner, and so the whole amount is paid into a fund from which grants are made to benefit the Native people as a whole. The point to note here is that grants from this fund are in reality derived from the earnings of the Native workers themselves.

There are thus three ways in which the Native people help to support the hospital. These are through the fees which they pay to the hospital itself, through the taxes they pay to the Government and through the interest on their earnings when they are working on the gold mines. Sixty per cent of the hospital's income in 1943 came from these three sources combined. The only grants which can be said to come from general revenue are those from the Public Health Department and the Transvaal Provincial Council, and these form only one-third of our total income.

There is one other source of revenue which I must mention. As District Surgeon I receive a salary from the Public Health Department

---

*The Transvaal Provincial Council has since made a grant of £500 towards reducing this deficit,

and an allowance for all my official travelling. I am content, however, to work for a fixed salary and everything that I earn as district surgeon, I use to further the work of the hospital. From this source I have provided the motor cars which I have had to use for my work, and paid all the expenses of up-keep and travelling. Over and above this, however, I have been able in ten years to contribute £775 to current expenses and £450 to providing buildings and equipment.

Some medical missionaries whom I know and respect are of the opinion that we ought to finance our hospitals entirely from mission funds and not be constantly seeking for Government grants to support them. While there have often been times when I should dearly have loved to be able to snap my fingers at all Government departments, and make the hospital completely independent of them, I cannot for a moment agree that it would be right to do so. In this district, of which I am writing, there is a very large population and these people contribute a very considerable amount to the Government, not only in direct taxation, but also in indirect taxation. I am reliably informed that the taxpayers registered in the Sibasa area pay over £25,000 a year in direct taxation alone. That figure was certainly given in the Report of the Native Economic Commission (1930-1932). Yet right up to 1933 practically nothing was being done to provide medical services for these people. In these circumstances, I consider that I should be failing in my duty were I not constantly and repeatedly to impress upon the Government the need of the people for such services, and to claim their assistance in providing them. In so far as the Government fails to provide medical services itself, it is, I believe, the right and duty of missions to look to it for assistance, when they initiate and maintain them.

CHAPTER X.

THE TRANSVAAL PROVINCIAL COUNCIL AND MISSION HOSPITALS.

Under the Act of Union, hospitals were made the responsibility of the Provincial Councils, and are, therefore, not the concern of the Union Government. Consequently, when we set out to build a hospital, we looked first of all to the Transvaal Provincial Council for assistance, but we soon found that there was very little likelihood of any help from that quarter. The Council claimed that since the Union Government had deprived it of the right to tax the Natives, it could not be expected to take any responsibility for Native hospitals. The Union Government, on the other hand, maintained that hospitals, whether for Europeans or Natives, were not its concern, and that neither the Public Health Department nor the Native Affairs Department could assist hospitals as such. The result was that applications for assistance to Native hospitals were bandied to and fro from one department to another and usually got nowhere. The Native Affairs Department did indeed seek to solve the difficulty in 1929 by agreeing to subsidise the training of Native nurses, and laid down a basis on which grants might be given to hospitals which undertook this training. This provision has been of immense benefit, and has stimulated the training of Native nurses throughout the Union. The controversy between the Union Government and the Provinces over this question has dragged on for at least fifteen years, and even now it is not yet settled. It was this which lay behind the condition imposed by the Native Affairs Department in 1934 when they offered us a grant of £500 on condition that £500 was forthcoming from other sources. It was hoped that the Provincial Council would provide the other £500, and actually the Native Affairs Department approached the Transvaal Provincial Council with an enquiry as to whether the Council would be willing to make a grant jointly with them towards building this hospital.

This request was refused and it was not until 1941, after the hospital had been in existence for seven years, that the Council made a grant of £500 towards building a new ward and a new nurses' home. In the following year, they gave another £600 for this purpose, making their total contribution to the building of this hospital £1,100.

Throughout the years we have steadily and persistently pressed upon the Transvaal Provincial Council our claim for assistance towards the maintenance of this hospital, and in recent years our representations have been received with increasing sympathy. In 1935 it was agreed to make us a grant of £100 per annum. By 1938 this was increased to £250 per annum, and in 1941 to £500 per annum. In 1943 it was increased to £750 per annum, and I have just learnt that this year (1944) it has again been increased to £1,250 per annum. We are very grateful for this evidence of a growing readiness on the part of the Transvaal Provincial

Council to support the work of the hospital. It must be remembered, of course, that the total number of in-patients had increased from 205 in 1935 to 594 in 1943, and the number of patient days from 4,745 to 16,234. Our plea has always been that the Council should base its grants on the number of patient-days, instead of simply giving a block grant, as it does at present. Throughout the period of which I write, the Council's grant has, as a rule, been equivalent to about sixpence per patient per day. It has sometimes been as low as fourpence, but for the last three years has been about ninepence. In the Provincial Hospitals the grant made by the Council for the treatment of pauper Natives is five shillings per day, and in those hospitals practically every Native is regarded as a pauper. I believe that less than five per cent of the Native patients admitted to these hospitals pay any fees. It is because of the inability or unwillingness of the Provincial Council to make us a grant on a patient day basis that we have to depend upon the fees paid by the Native patients for a considerable part of our income.

During the time that Mr. Simon Bekker was Administrator of the Province we had hopes of better treatment for mission hospitals. In a letter to the *Rand Daily Mail* in February 1936 he stated that "the responsibility for Native hospitalisation has now devolved on the Provincial Administration, as the Central Government has refused any financial assistance from the Native Development Fund." In that year also a delegation representing Mission Hospitals in the Transvaal had an interview with the Hospital Commission of the Transvaal Provincial Council, and we learnt later that this Commission had recommended that these hospitals should be given a grant of 2s. 6d. per patient day, irrespective of whether the patient himself paid any fees.

In 1937, we were informed by the member of the Provincial Council for the Zoutpansberg that the Administrator had introduced the Hospital Commission's suggestion to the Council, and stated that the Hospital Ordinance would have to be amended to give effect to these suggestions. No objections were raised, and we were told, "the necessary measures are now being taken." It was added that "when the proposed amendments shall have taken effect the subsidy will be 2s. 6d. per day for all Native patients except those falling under the Department of Public Health." Our hopes rose high, but were doomed to disappointment. As far as I know, the amendments mentioned were never brought before the Council, and after Mr. Bekker's death, no more was heard of them.

By 1939, we were again being informed by the Provincial Secretary that "the general question of Native hospitalisation at present forms the subject of discussion in regard to financial responsibility as between the Union Government and the Provincial Administration. Applications for increased assistance to Mission and other Native hospitals in rural areas are, therefore, held in abeyance pending a decision in this matter." No decision has yet been reached, and we shall have to wait now for the Report of the National Health Services Commission and the Government decision on their recommendations. Personally, I do not think any finality will be reached until the Central Government takes over respon-

sibility for hospitals entirely. Otherwise, the Provinces will continue periodically to raise this question of their responsibility for Native hospitals, as distinct from European hospitals, and we shall doubtless have further discussions, more Commissions and the long-drawn-out controversy will drag on indefinitely. I have written here of the Transvaal Provincial Council because I have had to deal with them personally, and I have been able to refer to my files for evidence in support of what I have written. The other provinces, however, adopt the same attitude and, indeed, neither the Cape nor the Natal Administrations treat the mission hospitals within their borders as generously as does the Transvaal, although in the Cape there is one mission hospital (Victoria Hospital, Lovedale) which has been placed on the same basis as other public hospitals. No other mission hospital in South Africa enjoys the same privilege.

At the back of all this discussion and controversy there is something much more important than a mere tussle between the Central Government and the Provinces. It is the question of whether the country, as a whole, is prepared to assist the Native people from the general revenue, or whether the Native must pay out of his own pocket for such services as education and health. The attitude of the Provincial Administrations is that, since they are not permitted to tax the Native, they cannot be expected to take any responsibility for providing him with medical services, and it is quite evident from their treatment of Native Education that, if they did have such powers of taxation, the services they would render the Native would be limited to what could be paid for from the proceeds of his taxes. They completely ignore the Native's contribution to the national income, and the amount he pays in indirect taxation. They also ignore the fact that the Union Government, which does tax the Natives, is the principal source from which they themselves derive their revenue. To put it bluntly, what the Native pays in direct taxation may be spent for his benefit. All other revenue is to be regarded as the White man's money and must on no account be used to assist the Native. This principle has never been strictly adhered to by the Union Government, which for many years has made a contribution to Native Education from the general revenue. In the 1944 budget provision has been made for this contribution to be increased, and for aged Natives to be admitted to the benefits of the old age pension scheme. Nevertheless a large section of South African opinion still adopts this attitude.

Yet, South Africans individually are, as a rule, very generous people. Just recently a Native man lost a span of oxen which were struck by lightning on the Pretoria-Johannesburg road. The loss was reported in a Johannesburg newspaper and within two or three days over £80 had been sent to the paper to enable this man to replace his oxen. The kind-hearted individuals who made these donations obviously did not consider that they must not use White men's money to help a Native. They simply thought that here was a poor man who had met with a serious misfortune, and they promptly sought to help him. But when it comes to dealing with suffering amongst a great mass of poor and ignorant people you and I allow the responsible authorities, whom we have elected, to say that they

cannot provide adequate assistance, as they cannot tax these people to provide the necessary funds.

Perhaps it is because so little is known of the life of the Native people in the reserves and of the sickness and suffering which exist amongst them. Many people, too, are lulled into an easy acquiescence with the existing state of affairs by the oft-repeated tale that the Natives dread hospitals and will not go to them. The Natives, they say, prefer to die in their kraals rather than go to hospital. In this book I have tried to tell something of the need and to illustrate it by actual individual cases, and I can point out that, although fear of hospitals does still exist, nearly six hundred Native patients were treated in this hospital last year, and that the majority of these paid something towards the cost of their treatment. The truth is that wherever hospitals have been provided for them, the Natives have made use of them, and are doing so in ever-increasing numbers year by year.

During the last two years, much attention has been given in the Transvaal to the subject of Free Hospitalisation. In August, 1939, the Executive Committee of the Transvaal Provincial Council appointed a Commission "to consider and report upon the advisability and feasibility of expanding the existing field and scope of Free Hospitalisation so as to cover all classes of the community." The outbreak of war naturally hampered the work of this Commission, and it was unable to present a complete report. The Executive Committee then instructed the Provincial Secretary, Mr. H. F. Pentz, to examine the incomplete report, and, if possible, to formulate a scheme based upon it. In Mr. Pentz' Report it is admitted that "adequate Native hospitalisation is not beyond the financial resources of the Transvaal, if one is able to assume that our present sources of revenue cannot only be maintained but may be expected normally to increase pari passu with the additional expense entailed by the development of Native hospitalisation." He also states that in the Zoutpansberg area there are 247,000 Natives, and goes on to say: "A small European hospital is contemplated for this area, but only a few beds for very urgent and acute cases will be provided for non-Europeans. On the basis suggested by the Commission, 450 beds will be necessary for the Natives of this area. There is not the least likelihood of any such provision being made for several decades. The fact of the matter is there has been no demand for it." Mr. Pentz, however, omits to mention that the two mission hospitals in the Zoutpansberg (Elim Hospital and the Donald Fraser Hospital) already supply nearly half the number of beds suggested, and can easily supply the full number, (450), within a very few years, instead of several decades, if they are given reasonable assistance.

There are two main proposals in this report for the provision of hospitals for the Native people in the Transvaal. The first is that the Province should be allowed to impose additional taxation upon the Natives, and the second that expenditure on Native hospitals as between the Province and the Central Government should be on a pound for pound principle. It is admitted that "a cursory examination of the position seems to show

that the Native is taxed, comparatively speaking, very much more heavily than the European." Personally, I should have thought that the most cursory and superficial examination would have shown this quite definitely. For instance, my own Native cook, whose wages are less than one tenth of my own salary, pays exactly the same amount in taxes each year as I do. In spite of this admission, it is proposed that the Natives of this Province shall contribute an additional £100,000 per annum to the revenue of the Province.

We naturally expect to find that they will reap greatly increased benefits in return for this additional taxation, which the Report suggests should not be regarded as taxation, but as payment for services rendered. Actually, the Report states that: "for all practical purposes, it may be said that for Natives Free Hospitalisation exists today." This bears out my contention that practically all the Natives admitted to Provincial Hospitals are treated as paupers. It is also stated that: "there is no doubt that for a long time to come it will not be possible to provide sufficient hospital accommodation for those out-lying areas where there is a large Native population. For years to come, we shall have to rely on missionary and charitable effort." Quite evidently then, nothing very much is to be done for those out-lying rural areas of the Transvaal, where, as the Report itself states: "most of our Natives are to be found."

It is accepted in the Report that the cost of Native hospitalisation is between five and six shillings per patient per day. In this hospital, we have seen that it is approximately 3s. 9d. This is chiefly due to the fact that this hospital is sadly understaffed as compared with Provincial standards. According to the figures adopted in this Report as a basis for the staffing of hospitals, we ought to have eight trained nurses and eighteen probationers in this hospital. Actually, we have two trained nurses and twelve probationers. As it is proposed to grant Mission Hospitals a subsidy of only 2s. 6d. per patient per day, it is clear that there is little prospect of our being able to increase our staff. Remember that under this scheme all patients will have to be treated free, for the Native who finds that he is having to pay an increased tax to provide free hospitalisation, will naturally and rightly refuse to pay fees at any hospital, no matter whether it is a mission hospital or a Provincial hospital.

It is quite evident, therefore, that under this scheme the Native people will derive very little, if any, additional benefits in return for the £100,000 which they are to contribute to the Province. The position in the Sibasa area is very illuminating in this respect. I have already mentioned that there are between 25,000 and 30,000 Native taxpayers domiciled in this area. We may take 28,000 as an approximate figure. If all of these pay the proposed tax of 2s. 6d. per annum (and some will actually pay more), the total amount collected will be £3,500. The great majority of these taxpayers have their homes and families in the Sibasa area, where the only hospital available to them is the Donald Fraser Hospital. Let us assume that the abolition of hospital fees results in doubling the admissions to the hospital. Under the proposed scheme we should then receive a subsidy of £3,630 a year, but only half of this is to be paid by the Province.

The other half is to be paid by the Central Government. The Province would, therefore, pay £1,815 as their share, but as they already make a grant of £750, their actual increased expenditure would be only just over £1,000. They are to collect additional revenue from Natives, whose homes are in this area, to the tune of £3,500, but their additional expenditure is not likely to be more than £1,000. Actually, their expenditure would almost certainly be less, as I do not believe that the abolition of fees would result in doubling the admissions to the hospital for at least several years.

The Report itself states that the expenditure on Mission Hospitals, if they are subsidised at the rate of 2s. 6d. per patient day, will be between £5,000 and £6,000 per annum. This indicates that no very great increase in the number of admissions to these hospitals is anticipated. Of this amount, the Province will pay half, that is, about £3,000 and the Central Government half. It boils down to this: The Native people are to contribute an additional £100,000 a year to the Provincial Exchequer, and in return, the Province will spend about £3,000 in subsidising hospitals in the outlying rural areas where the majority of the Native people live. Fortunately, the Province is not likely to obtain the powers of taxation they desire. This in company with other schemes, is being considered by the National Health Services Commission, and it is to be hoped it will receive the condemnation it deserves.

CHAPTER XI.

THE LAND AND THE PEOPLE.

I have neither the knowledge nor the ability to write at any length upon the habits and customs of the two tribes which live in this district. In any case, these have been very fully described by others better qualified than I am to do so, but there are certain aspects of their environment and of their customs which affect their health, and it is to these that I now wish to direct attention.

The district is an extremely fertile one, and ordinarily enjoys a very high rainfall compared with the rest of the Union. There are records of as much as ninety inches of rain in a year. In 1915, for example, the Additional Native Commissioner, Mr. Harries, states in his book: *The Sacred Baboons of Lomondo*, that it rained incessantly for five weeks, registering a fall of quite seventy inches. During our first five years in the district we expected heavy rains every summer and we were seldom disappointed. Since 1935 we have kept a record here of the rainfall, and we expect an average of about forty inches annually. Higher in the mountains it is very much more. After heavy rains, many tributaries of the great Levubu River, which intersect the southern slopes of the Zoutpansberg range become flooded, and make travelling within the district very difficult and sometimes impossible. I became expert in judging when a car could be safely driven through a river, and often got through when others failed, but many a time I got stuck in boggy places or flooded streams, and more than once I had to sleep in the car in consequence. Sometimes we were cut off from the outside world for several weeks at a time. On one occasion, the Inspector of Schools was caught by the floods, and had to spend nearly two weeks with us. At that time we had no telephone and the rivers between us and Sibasa were unbridged, so that he could not send any message to his wife or to the Department concerning his whereabouts. After ten days or so, we learnt that it was possible to cross the Mutshindudi River by means of a tree trunk which had fallen across the river. I was able to drive him as far as this river and to help him across to the other side, and then he set off to walk the remaining five or six miles to Sibasa. On my way back across the tree I fell into the river, and I had to scramble out and drive home in my soaking and muddy clothes. During the last five years, much has been done to improve the roads and some of the rivers have been bridged, and so I have been able to move about the district much more freely. Even during this last fortnight, as I have been writing this book, although we have had over fourteen inches of rain, I have had to cancel only two of my tours and to curtail two others. Yet there are many parts of the district which remain quite inaccessible by car even in the dry season, and there must be hundreds of people who cannot obtain the services of a doctor except with great difficulty, even in cases of acute and serious emergencies.

The fertility of the district makes the production of crops fairly easy.

Ploughing usually begins about November, and for the following three or four months the people are very busy on their lands. Usually this affects the hospital's work, and we have a quieter period during these months, as the people will not leave their ploughing to bring the sick to hospital. Lately, however, this has been less manifest. We have been busier during the last few summer months, I think, than we were in the winter. Fruit trees, such as citrus, mangoes, avocado pears and pawpaws grow easily and are often found in and near the Native kraals. The people are fond of these fruits, and make free use of them. They also use some of the wild fruits, which grow very freely. Of these, the commonest and most popular is the *marula*. They gather the fruit of this tree and brew a beer from the juice. The police say their busiest time is when the *marula* beer is made. The kernel of this fruit is also extracted, when dry, and eaten. It resembles a walnut and Europeans, as well as Natives, enjoy its flavour.

Unfortunately, there is a tendency for the people to congregate in ever-increasing numbers in certain areas, and this is resulting in the rapid disappearance of grazing for cattle, the denudation of even the steep hillsides and the gradual exhaustion of the soil. When I came here eleven years ago, the hillside below the hospital was thickly covered with bush. I remember scrambling through it when I was searching for the shortest way to bring water to the station from the stream in the valley below. Today all that bush has gone, and although it is a rocky steep hillside covered with very stoney soil, it is all being brought under cultivation. Even when they are not in flood, some of our rivers are constantly running brownish-red with mud, and soil erosion proceeds at an alarming rate. Once the crops are reaped, the cattle are turned into the lands, which are then neglected until the next season, with the result that noxious weeds flourish unchecked and cover large areas of ground.

The crops produced, principally maize, are insufficient to feed the population, and, as in every other Native area of South Africa, large quantities of maize have to be imported every year. There is no means of earning money in the reserve, so large numbers of men leave it every year to seek work in town. Many of these return after a few months, but some stay away for several years at a time, and there are far too many who desert their wives and families in the reserve and disappear for long periods. In the towns, some of the men contract syphilis, and nearly every case I see here can be traced to some man who has recently returned from town. The wonder is that this disease is not more common, but in the last six months, while I have had an assistant, we have taken a considerable number of blood tests and the percentage of positives has been very low. While the men are away, the women are expected to support themselves from their gardens, and must send a message to their husbands if money is needed for any special purpose. This often leads to delay on the part of the women in taking their children to hospital, when they are ill, as they must have the father's consent before doing so.

After the outbreak of war, the Native Military Corps was formed and over three thousand men from this area joined up. I had a very busy time

for some months because, as District Surgeon, I had to examine every one of these recruits. Many of these men are still away, some have been killed, some are prisoners of war, and some have been wounded. Not so long ago I found one of them waiting for me by the roadside about twenty miles from Sibasa. His leg had been shattered by a bomb up north and he had been brought back to the Union. After a time in hospital, he was given ninety days' leave and sent home, although his leg was not completely healed. No one seems to have troubled to ask how he was to get to his home after he left the railway bus. Probably no one realised that his home might be, as it was, more than twenty miles from the bus terminus, and that he had no means of getting there. Someone gave him a lift, and he did get home, but there he remained. When I saw him, he wanted me to certify that he was unfit to return to duty, as indeed he was, but I persuaded him to let me take him back to Sibasa and arrange with the Commissioner there to send him back to the military hospital to complete his treatment and to claim a pension. Had I not picked him up in our motor truck, he might have remained at home indefinitely, been classed as a deserter, and probably forfeited his claim to a pension.

While these men are on service, their wives and dependents receive an allowance, and this has brought a new prosperity to the district. Never before has so much money been in circulation amongst the people here, and it is fortunate that it is so, in view of the high price of maize today. The price of mealie meal at Sibasa today is twenty-five shillings and sixpence a bag and at the more remote stores it is even higher. Our Government subsidises the price of bread for the Europeans, but does nothing to keep down the price of maize, the staple food of the Native people.

The people live in kraals, more or less similar to those which are familiar all over South Africa. In this district the huts are built of poles cut from the forest. These are erected to form a circle and are plastered over with mud. The framework of the roof is formed on the ground and lifted into position on the hut, and thatched with grass. Thatching grass is difficult to obtain in large quantities and the quality of the thatching is very poor. When the hut is completed, the exterior is often decorated with clays of various colours, and has a very picturesque appearance. Inside the hut is usually dark, as there are no windows, and it gradually becomes blackened by the smoke of the fires which are often burning in the centre of the floor. The Bavenda, particularly, usually keep their huts very clean and tidy. Termites soon begin to attack the poles embedded in the mud plaster and, in many cases, the hut lasts only a few years. High winds often carry away the roofs of huts, and in the rainy season many more collapse, as the thatched roofs are never waterproof. Consequently, there is always a big demand for poles for building and the trees and forest are being all too rapidly destroyed. An effort was made to check this by making it compulsory to obtain from the Additional Native Commissioner a permit to cut poles for a hut. The charge for this was 2s. 6d. each hut. When the permit was issued, Native rangers had to point out where the poles could be obtained and which trees might be cut. This system was beginning to check the destruction which was

taking place previously, but it gave rise to repeated complaints by the Native chiefs, and in 1942 the charges for the permits were abolished. Since then, I am told, it has again become almost impossible to keep a check on the rapid deforestation of the district. The season's crop of mealies is also stored in granaries made of poles, plastered over in much the same way as the huts.

The darkness of the average hut makes it a favourite resting place for mosquitoes, and every year malaria is prevalent throughout the district. Cases occur all through the year, but the worst months are from February to May. The malaria carrying mosquito breeds along the river banks, and my experience has been that if we get heavy rains and flooded rivers, many of the mosquitoes and their larvae are washed away and malaria is not so severe as it is in drier years. The dark, ill-ventilated hut, and the universal habit of sleeping with the head completely covered by the blankets are also favourable to the spread of tuberculosis.

The Bavenda depend for their water supplies upon the springs, which are very numerous along the valleys of the Zoutpansberg range. The women, of course, are the water carriers and may often be seen on their way to and from the spring. No attempt is made to protect these springs and the ground round about them is often converted into a muddy swamp by the cattle that also come to drink there. The Bavenda are a very clean people, and are often to be seen washing themselves and their clothes at or near the drifts across the river. Curiously enough, they always seem to choose the drifts for this purpose and not the more secluded parts of the river. One of our local business men, who also owns stores in Bechuanaland, tells me that he is surprised to find how much soap is bought by the people here. In the low veld water is not so easily obtained, and the Shangaan people often have to go considerable distances to get water from the rivers. In recent years the Native Affairs Department has been trying to assist them by building dams and putting down boreholes. The boys of both tribes are fond of bathing and swimming in the rivers, and on a hot day I often envy them as I see them splashing about in the pools. Unfortunately, as we have seen, there are crocodiles in these rivers to make bathing dangerous, and there is also bilharzia. I believe the percentage of children suffering from bilharzia is very high, particularly in the lower, flatter parts of the district, where the mountain streams have broadened out into slow flowing rivers.

The cattle are kept in kraals in close proximity to the dwelling huts and the result is that in every village flies abound. Visit any village, and when the children run out to meet you, you will see the flies settling round their eyes and noses, but especially round the eyes. No wonder, then, that conjunctivitis is so prevalent and often leads to such distressing results. Malaria, bilharzia and conjunctivitis are the three commonest diseases in the district and between them they account for a great deal of the sickness and suffering which prevails. If we could rid the district of these three menaces we should have gone a long way towards improving the health and happiness of the people.

The Public Health Department has made an effort in recent years to

tackle the malaria problem. Provision has been made for the employment of ten Native Malaria Assistants to work in this area, but actually, at present, there are only four employed. These men are under the supervision of a Malaria Inspector stationed at Louis Trichardt and he, in turn, is responsible to the Senior Malaria Officer who is in charge of a research station at Tzaneen. These Malaria Assistants are given two weeks' training by the Malaria Inspector, and are expected to attend a further two weeks' course every year. Normally, their training is conducted at the research laboratory at Tzaneen, but since the outbreak of war this has been discontinued. Their work is to try to educate the people in regard to the cause of malaria, and the means of preventing and treating it. They are also expected to collect data in regard to the incidence and prevalence of malaria, and to follow up their propaganda work by distributing quinine and paraffin and pyagra and spray pumps. The drugs are supplied free of charge, but the pumps are sold for sixpence each. When they find patients suffering from "fever," they give them quinine, with instructions as to how to use it. If they are uncertain whether the fever is due to malaria, they take a blood film and send it to the Malaria Inspector in Louis Trichardt for examination. Considerable difficulty has been experienced in maintaining their work, as no transport is provided for the distribution of the anti-malarial supplies.

It is quite obvious also that the number of assistants employed is far too small for such a large area. This, of course, is partly due to the difficulty of getting suitable men for the work. As it is, many of those employed are very poorly educated. Two weeks' training for a boy who has only passed Standard VI is a most inadequate preparation for the work of educating the people and enlisting their support for anti-malarial measures. Unfortunately, too, they get very little supervision. The Malaria Inspector in Louis Trichardt is in charge of the whole of the Zoutpansberg district. During the height of the malaria season he is far too busy with the European portion of the district to be able to visit Sibasa more than once in three months. In the winter, he usually comes out at the end of each month. This anti-malarial work, and the mass vaccinations carried out by myself as District Surgeon, are the only public health measures so far undertaken in the district.

CHAPTER XII.

WOMEN AND CHILDREN.

When I first came to Sibasa, an older missionary told me that the Venda men were fairly easily converted, but the Venda women only with great difficulty. In the preceding pages, I have frequently referred to the conservatism and superstition of the women, and I have already discussed the difficulties associated with childbirth. Now, let us look at their attitude and customs in regard to the rearing and training of their children. Full details of these have been given in such books as *The Bavenda*, by H. A. Stayt and *The Life of a South African Tribe*, by H. A. Junod.

Amongst both the Bavenda and the Shangaans the mother and her baby remain in seclusion for a stated period after the birth. The newly-born Venda baby is given a few drops of medicine to drink immediately after it is born. No Native woman of either tribe believes that a baby can live without medicine, or that the child can thrive on breast milk alone. Breast feeding is, of course, universal, and the baby is put to the breast whenever it cries. From the very first week of its life, the baby is given a mixture of very weak mealie meal and water. The strength of this is gradually increased as the child grows, but he is not weaned for at least two, or even three, years. The child must never drink ordinary water. In spite of this treatment, which is so contrary to all modern teaching, most of the babies seem to me to thrive amazingly. For a time, I tried to get the mothers who had been confined in hospital to bring their babies to see me regularly at my out-patient centres to be weighed. I found, however, that the babies gained weight so rapidly that the little scale I carried in my bag soon became useless, and it was enough just to look at the child to see the progress being made. Many of them, however, do suffer from intestinal trouble, either constipation or diarrhoea, and in view of their long-standing belief, I feel justified in giving the mothers an occasional bottle of very weak medicine to correct this. I am always impressing on them that breast feeding is quite sufficient and urging them not to give the baby any other food during the first few months of its life. It is well known, however, that breast-fed babies often suffer from constipation, and this always worries Native mothers, so it is just as well to give something to try to overcome this.

I do not venture to make any guess as to the infantile mortality in this district. As I have said before, we have no means of knowing this as there is no system of registration of births and deaths. I think that malaria often takes a heavy toll, as well as chest complaints such as bronchitis and pneumonia, but the babies who escape these thrive remarkably in the care of their mothers. Later on, when the child has been weaned, and another brother or sister has come on the scene, he may not get on so well and the young herd boys, particularly, often have a very thin time of it.

When puberty is reached, both boys and girls have to pass through

certain ceremonies. We have seen already that the Shangaans practise the rite of circumcision, but this is not the case with the Bavenda. Amongst the latter, the more important and striking ceremonies are connected with the initiation schools for the girls. When a girl reaches adolescence she must attend the *Vhusha*, or *Khomba*, which is held at the village of the district chief, or petty chief. As soon as possible after this she will attend the *domba*, which usually lasts about three months, but may be protracted to eight or nine months. This *domba*, which everyone may attend, " is a general preparation for marriage, where boys and girls who are usually separated are brought together and by means of symbols and metaphors, are taught together to understand the true significance of marriage and childbirth ; and by the same means are warned of the pitfalls and dangers they are likely to encounter during the course of their lives." (Stayt). When they emerge from this school the girls are ready for marriage.

From the little I have seen of them and of their effects on the initiates, I agree with the following account, which is taken from Stayt's book on the Bavenda.

> " The mystery and excitement connected with the different schools imbues them with a fearful fascination. The young people enter them at the most impressionable time of life, and they are a compulsory part of the training of every Muvenda boy and girl. The training is hard and cruel, especially for the girls, for whom the ordeals and instruction are an almost intolerable burden, taxing their strength both mentally and physically and making an indelible impression on their unformed minds and bodies, which is reflected in all their future bearing. Often they are terrified, and seem to lose every trace of self-expression and individualism, obeying their tormentors mechanically with a docile, unquestioning humility. They have, or until recently had, no choice but to attend the schools, and the fact that a truant is socially ostracised explains the difficulty that missionaries experience in keeping them away. The conclusion of the *domba* is welcomed with relief by all the initiates."

In view of this, all the missions working in this district naturally give much attention to work amongst women and girls. We believe that the training of girls as nurses at a hospital established within the district is already having an effect in encouraging the education of girls, and that it is possibly our chief contribution to helping the women of Vendaland. Nevertheless, we have tried to assist them in other ways also. My wife has charge of sewing classes at our main school at Gooldville and supervises similar classes at four other schools. She also runs a detachment of Wayfarers for the older girls and of Sunbeams for the younger ones. These correspond to the European Girl Guides and Brownies.

In 1942, however, we decided to make the experiment in conjunction with the Wayfarer Movement of running a camp for girls which would take the form of a Christian initiation school. The local Christian women were consulted and gave the scheme their approval and support, and agreed to send their daughters to the camp. They admitted that they

themselves felt unable to give the girls the instruction they ought to have in preparation for marriage, and that they were concerned in regard to this. Fortunately, we had at that time the help of Mrs. A. H. Keen, an enthusiastic Wayfarer, and she organised and ran the camp for us.

We obtained the use of a splendid site completely enclosed by a high fence of thorn bushes. Inside this natural barrier the camp was completely secluded, and no one passing by could see anything taking place inside. Sixteen girls were admitted to the "school." They had to go out each day to collect their own firewood and to bring in water, and they had to do their own cooking. The mothers were given free access to the camp and were encouraged to spend part of each day there, and to be present at all the classes that were held. They often brought food with them for the girls. Every morning the girls had to perform a series of strenuous physical exercises, and during the day classes were held at which they were given simple, but clear, instruction in anatomy and physiology, the main facts of sex, and the process of child birth. They also received lessons in practical cooking and the duties and responsibilities of housewives. The care of babies was demonstrated by the Matron and nurses from the hospital. Two of our orphan babies spent a whole day in the camp where their usual routine was carefully observed. Missionaries of other churches and stations came to help in teaching the girls. In the evenings around the camp fire the girls were encouraged to ask questions on the lessons of the day, and these showed how deeply interested they had been and how much they were thinking about the matters discussed. The day finished with a sing-song and evening prayers.

It is impossible yet to assess the results of the experiment. Probably we shall never be able to do so. Of the girls who attended the camp three have now begun their training as nurses in the hospital. The mothers asked that similar camps should be held in the future. At least we believe that these girls were given, however faintly and imperfectly, a nobler conception of the wonder and mystery of life than they could have gained in secret from others, and they were certainly saved from the degrading teaching they would have received at the *vhusha* and *domba*. We believe, too, that the fuller knowledge gained at this camp has enabled many of these girls to withstand the moral temptations to which they are constantly exposed and to which so many succumb.

CHAPTER XIII.

TEACHERS AND SCHOLARS.

In addition to my other duties, I have to act as Superintendent of our ten mission schools in this district. This means that I am responsible for appointing and dismissing the teachers, subject to the approval of the Transvaal Education Department, for the upkeep and, where necessary, renewal of buildings and the supply of equipment, for all correspondence with the Department and generally for exercising supervision over the work of the schools. To an increasing extent it means acting as an unpaid clerk for the Education Department. Quite frankly, I am unable to give this part of my work the time or the attention it deserves, and much to my regret it is often sadly neglected.

I sometimes hear people say that they quite approve of *medical* missions with so much emphasis on the word "medical" as to imply disapproval, or at least very grudging support for any other form of mission work. I wonder whether such people realise the difficulties which medical missions would encounter if they had to work unaided by educational and evangelistic agencies. For myself, I gladly acknowledge the immense debt I owe to my fellow missionaries of several churches, and more especially to my predecessors at Gooldville, Rev. D. A. and Mrs. McDonald. For very many years these two laboured here under conditions which would have discouraged and disillusioned most of us. They succeeded in building a church and in establishing schools, and they laid the foundations on which I have been able to build in these last ten years. Mrs. McDonald gave freely of her strength and skill as a nurse, and often taxed her strength severely by trudging many miles to attend women at their confinements or to rescue twins when she heard of their birth. I believe that she was responsible for saving the first twins who were allowed to survive in Vendaland. Some of the church members may seem very imperfect. You can easily find plenty to criticise in them, but I know the part they played in helping to break down the prejudice against hospital treatment. I think of one woman particularly, who would get up in the night and go to assist a heathen woman in distress and persuade the relatives until she got their consent to calling the doctor. From the schools, too, primitive though they were and still are, have come the girls who are now being trained as nurses. Had there been no such schools, we should have had to wait many years before we could even have begun this training. The slight discomforts and difficulties we have to contend with today are as nothing compared with the dangers and sufferings which the pioneer missionaries had to endure, and we ought never to forget that the progress which is being made today is the direct outcome of the work which they began.

The schools they established are still in existence today. Some have made remarkable progress, others have remained more or less stationary. Throughout the whole district in recent years, there has been an increase

in the interest shown in the schools and the demand for education is steadily growing. When I came here eleven years ago, one of my first duties was to close down a school where the attendance did not warrant keeping a teacher. The Education Department will not make a grant for a teacher's salary if the average attendance at a school is below twenty-five, and in this case, I received a telegram from the Inspector informing me that the grant had been withdrawn. All my pleading was of no avail, and I had to close the school. After that, it was often a struggle to save other schools, and many a time we were in danger of having to close some. At one time, I ordered my teachers to report to me the average attendance every fortnight, so that we could take prompt steps to check any decline. For the last few years I have had little cause for anxiety on that score, and the difficulty now is to provide accommodation and teachers for the growing number of scholars.

I hesitate to criticise the schools too severely because I know how easy it is to find fault with Native education, and I must say at once that the Native teachers themselves are not entirely responsible for the backward state of their schools. They get far too little help and encouragement in the difficult task assigned to them. We take a young man who has had three years' training as a teacher and send him out into the bush to teach in a school. He lives in the midst of heathen people, he is exposed to constant temptation, and he is often far away from all the influences which can help him. Many superintendents have far too many schools to supervise, or have other duties which make more urgent demands upon them, and so they are unable to visit their schools with any regularity. The inspectors, too, have far too many schools under their charge. I believe the inspector in this circuit has about three hundred schools in his area. I know that some of my schools have not had a single visit from an inspector in ten years. The wonder is that the teachers do as well as they do.

The school buildings vary considerably. There are a few good buildings of burnt brick with galvanised iron roof, but the majority are pole and daub buildings with thatched roofs, which are in constant need of repair. Only last week one of my teachers came to report that the roof of his classroom had collapsed after the heavy rains we have just had. There are no funds available for building schools, and although education is free, the Native himself generally has to pay for the erection of new classrooms. I question whether there is a single school in this area where latrines have been built. The scholars make use of the surrounding bush. I have already mentioned the disparity between the numbers of boys and girls attending school. Another striking fact is that while the sub-standards are usually overcrowded, very few children remain at school after Standard I. Here at Gooldville, where the enrolment is about two hundred and fifty children, over one hundred and fifty are in the two sub-standards. This affects the whole work of the school. Manual work, for instance, which should be an important part of the curriculum, is difficult to organise because it is almost impossible to supervise this mob

of small boys, and at the same time give the older boys work of sufficient interest and practical value.

Many of the children come to school in ragged, dirty clothes, and it is difficult for the teachers to insist upon a higher standard of personal cleanliness. If they send the children home to wash their clothes, the parents complain and may take the youngsters away altogether. Then the attendance drops, and the teacher may find himself in danger of losing his job. Every boy who comes to school seems to think he should wear a jacket or waistcoat, and so you see a small boy wearing his father's old coat which is many sizes too big for him. Here at Gooldville we are trying to improve matters by introducing a school uniform made of cheap but strong and serviceable material. We hope in this way to encourage a higher standard of personal cleanliness.

Some of the children have to come long distances to school, and often leave home early in the morning before any food has been prepared. They spend the day at school, and do not get home until three or four o'clock in the afternoon. When the mother sees them returning she leaves her work in the fields, and begins to prepare a meal for them. They may thus have to wait until nearly five o'clock for their first meal of the day. The introduction of school meals will be a great help to these children, and is a subject on which I shall have more to say later.

CHAPTER XIV.

WHAT SHOULD BE DONE ?

In the preceding pages I have tried to describe and illustrate the health conditions in this district of Sibasa, and to show what has, so far, been done to meet the needs of the people there for medical services. I have tried to give an accurate picture and some may think that I have not painted it in dark enough colours. At least I hope that I have made it clear that the existing medical services are quite inadequate to meet the needs, and now I shall proceed to describe the kind of service which I think should be provided.

Planning for the future is an absorbing pastime, and I hope I may yet see some of my dreams taking shape as accomplished realities. I am not alone, of course, in submitting plans for future health services. In the last two years, literally hundreds of these have been submitted to the National Health Services Commission. Some of these seem to me to be frankly fantastic and not based on any practical experience of the actual problems to be solved. We are told, for instance, that we should have one doctor for every one thousand people in this country. That would mean that we should eventually have one hundred and fifty-three doctors in and around Sibasa. I cannot imagine what we should all find to do. I am naturally of a somewhat lazy temperament and have often wished to have an easier life than I have had here, but I hope I shall never be content to be one of a hundred and fifty doctors in an area like this. I entirely agree with the Editor of the *South African Medical Journal* who said that he shuddered to think that the population of South Africa should ever become so disease ridden as to need one doctor for every thousand persons. Give me a team of ten, or twelve, really keen and hard-working doctors and I believe we could soon transform the health conditions in this area.

Modern medical practice may be divided, broadly speaking, into two main types, curative medicine and preventive medicine. In the past our attention has been mainly focussed upon the curative aspect. We all know what illness means and we think of doctors and nurses in terms of what they can do to relieve us of pain and suffering. We give less thought to those doctors and their assistants who, by their foresight and vigilance, seek to protect us from the onset of disease through the control of environment, the inspection of food and water supplies, and the eradication of infectious diseases, yet their work has probably done far more for the health and happiness of the human race than that of the most brilliant surgeons and physicians. In the rural and Native areas of South Africa such medical services as have been established have been almost entirely on curative lines. It was almost inevitable that it should be so. Sickness and pain are very insistent in their demand for relief, but are quickly forgotten once relief has been given. In my own district of Sibasa I have told the story of how we have built up a small hospital and nursing service the aim of which is obviously the cure of disease. As I have indicated,

an attempt has been made by the Public Health Department to start anti-malarial work and to give protection against outbreaks of smallpox, but no public health work on a big scale has, so far, been attempted. Yet the three chief diseases in this district—malaria, bilharzia and conjunctivitis—could probably be almost entirely eradicated by a properly planned combination of both preventive and curative measures. The first step towards securing this would have to be the appointment of a Medical Officer of Health for the district, whose whole time and attention would be given to preventive work, and who would have under him the staff necessary to carry out such work.

The scope of modern preventive medicine is very wide and includes such matters as housing and sanitation, food and water supplies, control of infectious diseases, maternity and child welfare, the health of the school child and the education of the people in health. All these require attention in the Native areas as well as in our cities and towns and elsewhere, but today they are almost entirely neglected.

I have already described the way in which the great majority of huts are built. Clearly this is a method which cannot be allowed to continue indefinitely, involving as it does the steady destruction of so much of the natural forest, and there is need for a determined effort to be made immediately to teach the Native people to build better houses. I believe it should be possible to evolve methods of building cheap and simple homes which would be far more healthy than the present dark, ill-ventilated huts, and I should like to see experiments made in the use of green bricks and of *pise de terre* walls, and of concrete blocks in areas where sand and gravel are easily obtained. It will, of course, take time and much patience to persuade the Natives to change their long established customs in these matters, and the day may come when some compulsion may be necessary by refusing any longer to allow poles to be cut for building huts. A few years ago, a large kraal near Sibasa was destroyed by fire, and the Additional Native Commissioner suggested to the owners that they should rebuild the huts with sod walls instead of with poles. They agreed and made a start, but very soon sent word to say that this did not accord with Venda custom and that they could not proceed. On the other hand, many people are beginning to build brick houses with galvanised iron roofs. Round the hospital here you can find a number of such houses. In many of them the windows are too small and the roofs badly constructed The cost of such houses is relatively high, and the owners tend to economise by using small windows and secondhand timber. Nevertheless, the desire for better houses is there, and should be encouraged. The Health officers in the district should be able to guide this ambition along right lines by providing plans, and advice as to materials and methods of construction. I should like to see loans made available to teachers and others to enable them to build houses, the loans to bear a low rate of interest and to be repayable on easy terms. As a beginning, especially when experimental work on building is being done, it might be possible to erect model houses near each of the larger schools, and use them for teaching the boys building methods and the girls housewifery. For it will not be sufficient

merely to build good houses. They must be properly cared for also. One of the arguments used in favour of the present Native huts is that when they become too heavily infested with bugs and other insects, they can be deserted or burnt down without much loss, whereas that cannot be done with the more permanent type of house. In olden times there may have been much to be said for this, but it is clearly a wasteful method. I believe the people themselves will soon begin to see the advantage of building better houses, especially if they can be taught reasonably cheap methods, and they will in time learn to keep these houses free of pests.

Sanitation must also receive attention in this connection. Clearly a growing population cannot continue indefinitely to use the bush as a latrine, and will have to learn to construct and use the necessary pits and buildings. Here again a start can be made by providing suitable conveniences at every school, teaching the children to use them, and making the teachers responsible for keeping them clean and decent. Eventually the health officials in the district should be given authority to insist upon the provision of some form of latrine at every house and every kraal. The fly problem will also require attention. So long as present conditions of agriculture continue, the people will keep their cattle near their houses. They should be taught and helped to construct fly traps in which all the manure must be stored. After a time, a system of inspection of the cattle kraals and of these fly traps will have to be enforced and carried out by the health officials.

The improvement of food supplies ought not to be as difficult as the improvement of housing, because it should involve less interference with the established habits of the people. Indeed, in view of what I have said in regard to the comparative rarity of such diseases as appendicitis, diabetes and even nephritis, I think we should be very cautious about introducing any radical innovations into the Native diet. What is certainly needed is more milk and more vegetables. These they are accustomed to use, but the supply is diminishing. The cows are poor and yield little milk. Wild vegetables are becoming more difficult to collect in large quantities. Here the Health officials must co-operate very closely with the agricultural officers. The most likely approach to the problem is through the schools. School gardens have already been started in many places. They should be extended and improved and used in conjunction with the scheme of free school meals. Fortunately, the Government has already announced its intention of providing such meals, and although the scheme is at present held up by the refusal of the Provinces to undertake any responsibility in connection with Native children, there is no doubt, I think, that it will soon be brought into operation. Properly administered and guided by expert advisers, it should prove an inestimable boon to the Native people. It will be most regrettable if the scheme is robbed of much of its value through mismanagement by ignorant local committees.

There are certainly going to be considerable difficulties in regard to it. The finance of it alone will prove a stumbling block. For instance, in a school of two hundred and fifty children, the cost of providing one meal a day at three pence for two hundred school days will be over £600. It will

be a heavy responsibility for a Native teacher, accustomed to living on nine or ten pounds a month, to administer such a sum of money wisely, and to account satisfactorily for its expenditure. Yet in areas such as Sibasa the responsibility must be undertaken either by the teachers or by the superintendents. For my own part, if I were to have the administration of the scheme for the ten schools under my superintendency, I think I should have to give up most of my other work, at least until the scheme has been thoroughly established.

Nor is it likely that the school gardens will be able to produce sufficient to provide vegetables for a daily meal. The holidays interfere too seriously with the care of these gardens, and the small number of older scholars also hinders their development. If, however, a certain number of more progressive individuals can be encouraged to produce vegetables for sale to the schools, the scheme can be made to benefit, not only the school children, but the district as a whole. It will be at least a step towards enabling men to earn enough at their homes in the reserve to keep themselves and their families without having to go to town in search of work.

The provision of milk for these school meals will also be a difficulty. It may be possible at first to introduce the use of powdered milk, but the aim should be to improve the local strain of cattle, and to encourage the production of more milk. The agricultural officers of the Native Affairs Department may be able to establish small dairy herds at selected centres and supply milk to the schools from these. Clearly, however, this whole plan of providing a free school meal offers a great opportunity to health officials to tackle the whole problem of malnutrition amongst the Native children, and a medical officer of health for the district should have on his staff several assistants specially trained in dietetics and able to organise and supervise the provision of these meals.

Water is perhaps of even greater importance than food, and the protection of water supplies will be another essential part of a health officer's duties. I have pointed out that in the more mountainous parts of this district, there are numerous springs and streams. All the springs should be fenced in to protect them from the cattle, for whom drinking places should be provided lower down the streams. In the low veld more dams and boreholes are needed so that the women need not spend several hours each day carrying water. Along the rivers and streams it should also be possible to provide safe bathing places where the water can be treated to keep it free from bilharzia. We have built hundreds of dipping tanks for cattle to get rid of East Coast fever, so why not construct bathing pools for human beings to save them from bilharzia ?

For the eradication of infectious diseases a combination of curative and preventive measures is necessary. The patients who suffer from the disease must be treated and cured, and the means by which the disease is transmitted must be eradicated or controlled. Malaria, for example, can be prevented either by curing all individuals suffering from the disease and so getting rid of the human carrier, or by destroying all malaria-carrying mosquitoes. In practice, neither measure by itself is likely to be completely successful, and a combination of both will achieve more

beneficial results. In campaigns against malaria, bilharzia and conjunctivitis, the public health officials must take measures to attack mosquitoes, snails and flies, and to prevent their breeding, and those in charge of curative work must seek to treat as large a number as possible of individuals actually suffering from the diseases. Instead of treating a few isolated individuals here and there, a campaign will be needed to identify the carriers of the disease and to treat them in large numbers.

In the provision of maternity and child welfare schemes and school medical services, the co-operation of the curative agencies will also be needed, and I shall describe these later.

The measures which I have already described cannot be fully successful until such time as the need for them is appreciated. Until then there is a danger that they will be regarded merely as innovations imposed by the tyranny of the White man, whose whims are quite unreasonable. Education in health matters will therefore be a most essential part of the work of the health officials in the district, and this should not be confined to improving the teaching of hygiene in the schools. Efforts must also be made to reach the adult population, and to convince them of the desirability and reasonableness of all that is being done. The moving picture can be of immense value here, and there will be great scope for the production of suitable films. The South African Red Cross Society has already made a start by the production of two films, one dealing with venereal disease and one with nutrition. I have shown the first of these, "The Two Brothers," to the people here, and I know that it produced a deep impression upon them. I believe it definitely led to several patients persisting with a more thorough course of treatment than they would otherwise have done.

I believe that much can also be done through camps for boys and girls such as the one I have already described. In the organisation and running of these, I am sure the missionaries of the district would co-operate most willingly with the health officials. Indeed, I would make a strong plea for the close association and co-ordination of all the agencies, both government and missionary, which are concerned for the welfare and uplift of the Native people.

CHAPTER XV.

AN IMPROVED CURATIVE SERVICE.

However perfectly organised and developed public health services may be, I cannot believe that we shall ever get rid entirely of the need for physicians and surgeons and hospital nurses, and the means for them to do their work effectively. Even if we have one doctor for every thousand persons, and he exercises the utmost vigilance, some of them will occasionally defy his authority, or elude his watchful eye, and commit indiscretions or expose themselves either wilfully or accidentally to the risk of infection. Boys will still climb trees, and some will fall and break their limbs. Nor have we yet learnt how to prevent every known disease. The common cold alone, for instance, is as difficult to prevent as it is to cure. Indeed, there probably comes a time when increased expenditure on purely preventive measures becomes merely wasteful, and unproductive of results commensurate with the expense and effort involved. Consequently, any well planned medical service must include provision for curative work as well as preventive work.

As far as I can see, the needs of this district can best be served by having one central hospital connected with a large number of dispensaries, which will really be extensions of the hospital outpatient department. Some of my Native friends are inclined to think that there should be more than one hospital, but they fail to realise how very expensive is the establishment and maintenance of a hospital. Money is better spent in providing one large central, well equipped hospital, than a number of smaller ones. Further, two doctors working together in one hospital can do better work than if each is trying to run his own show.

What is really needed to enable the hospital to minister more effectively to the sick throughout the district is the improvement of roads and communications. There has been a considerable improvement in the roads in the last ten years, but much still remains to be done. I have been able to appreciate this improvement for, as I write this, we have just recorded the wettest month we have known here since we began to keep records in 1935. Ten years ago, this would have meant our being shut up on our own station for at least three or four weeks, whereas actually there have been only three or four days when I have been unable to get out. It has meant, however, that owing to the absence of a bridge over a certain river, I have been unable to visit one of my outstations with a nurse in charge, for over a month, and have even had difficulty in getting supplies across to her. More and better roads, more bridges across the rivers, and an ambulance attached to the hospital, and it will soon be possible for us to bring help to any part of the district where it is needed.

One other thing is necessary and that is an extension of the telephone system, so that all outstation dispensaries are connected to the hospital by telephone. At present, only three of my district nurses are able to get in touch with me by telephone. The others have to try to get a boy with a

bicycle to carry any urgent messages to me. There is ample room for the development of postal services generally throughout the whole district. At present there are only four post offices, of which only two are telephone and telegraph offices. There is also a telephone and telegraph agency at the hospital. Natives often have to send or walk twenty or thirty miles to buy a postage stamp or to cash a postal order. Those who think that Natives scarcely need such things would be surprised to see the volume of business that goes through the Sibasa office alone. Roads, bridges and telephones are an almost essential prerequisite to the provision of improved curative services.

It is difficult to foretell what size the hospital should ultimately become. Various estimates have been made as to the number of hospital beds needed for every thousand of population, but I doubt whether any standard can be fixed. Personally, I believe that within the next year or two we shall need accommodation here for one hundred patients, and within the next ten years for anything from two hundred to two hundred and fifty, and I am preparing plans now for enlarging the hospital to this extent.

The outstation dispensaries should also be steadily increased in number. There should be one at every centre which I now visit and at each of these there should be a well-trained nurse and midwife. Each dispensary should be visited at least once a week by a doctor from the hospital. I should also like to see a district nursing supervisor appointed to pay regular vists to these outstations. As I have said already, each dispensary should have the telephone installed. At one time I was investigating the possibility of providing each district nurse with a wireless telephone transmitting and receiving set. The outbreak of war put a stop to any developments in that direction, but it is possible that after the war simpler apparatus will become available, and may make it easier to provide this essential quick communication between the hospital and the district nurses. Eventually, I imagine, we may have from twenty to twenty-five of these outstation dispensaries attached to the hospital. A team of about five doctors will probably be needed to cope with the work of the hospital of two hundred and fifty beds, and the twenty-five dispensaries.

One question which arises here is whether curative services to be provided in this way should be free or not. The argument most frequently advanced against free medical services is that the Native does not appreciate anything for which he does not pay. I am not at all sure whether this is simply a South African stock phrase passed on unthinkingly from one generation to another, or whether it has any real basis in fact. In any case, we have to consider whether we are anxious to provide these people with relief from their sufferings or whether our aim is to gain their appreciation and gratitude.

It may be that the Native is so contemptuous of anything offered to him free that he refuses to make use of it, or it may simply be that we Europeans consider that he is not sufficiently grateful for any favours we condescend to bestow upon him. In Johannesburg, at any rate, the Natives are evidently willing to make ever-increasing use of the hospital and I am told that ninety-five per cent of those admitted are treated free. They can

scarcely be expected to appreciate the overcrowded wards which they find there. The most important point seems to be first whether the economic condition of the Native is such that he cannot pay the usual fees for medical care, and second, whether any considerable number of Native people are debarred from seeking medical help through fear of being unable to pay for it. I believe the answer to both these queries is in the affirmative, and therefore I am in favour of making medical services free. I do not believe this will result in the Native people refusing to avail themselves of these services, and I am not greatly concerned if they fail to express their humble appreciation of these services as we might expect them to do.

I know, of course, that they are accustomed to pay for treatment by their own herbalists and medicine men, but in this district, at least, payment is usually in kind and not in cash, and is very largely dependent upon results. I had an instance of their attitude in this respect recently. I brought a patient to hospital suffering from severe heart failure. I went to a great deal of trouble to get him there as his home was some distance from the road. I took a stretcher and some of my own labourers to carry him to the roadside, where I picked him up in the truck. He remained in hospital for four months, and we used every means we could to relieve him. At the end of the time he was slightly improved, but there was no hope of any real cure, so we allowed him to return home when he asked to do so. I gave him the usual hospital account. A month or two later his mother came to report that he had died. She brought the account and asked what she must do with it. I explained to her that I had taken a lot of trouble to convey her son to hospital, had fed him for four months, and used a lot of medicine in an effort to help him, and suggested that she might at least pay half the account. She replied : " How can I pay for a person who is dead ? "

Looking back over my hospital records I find that every year, except one, showed an increase in the number of patients admitted compared with the previous year. In 1941, however, the number showed a slight decrease compared with that for 1940. Now, the rainfall that year was only eighteen inches. It was definitely a hunger year, and the people had to buy larger quantities of food than usual. This may be just a coincidence but I think it may be significant. I think, too, that the considerable increase in the number of admissions in the last two years, from 449 in 1941 to 569 in 1943, has been due in part to the increased amount of money circulating in the district as a result of the allowances being paid to the dependants of men away in the Native Military Corps. All this suggests that there is a connection between the economic condition of the Native people and their demand for hospital accommodation. My experience has been that fundamentally the Native people are honest. They do try to pay their accounts, as the records of this hospital show. When they have not got the money to pay, they hesitate to incur the expense of hospital treatment. That being so, I think there is a very strong case for providing them with free medical services.

So far, I have dealt with the services to be provided in the district itself.

There are, however, certain more specialised services needed, which will probably have to be shared with other districts. Chief amongst these are ophthalmic, orthopaedic and mental services. In view of the amount of blindness and eye disease amongst the Natives, I should certainly like to see arrangements made for a specialist to work amongst them, and for a time at least his services might be shared amongst several hospitals in a large area. A new orthopaedic hospital is being built in Pretoria, and this will probably have to serve the whole of the Northern Transvaal, though I hope in time to see a similar hospital established in Pietersburg. Finally there is a great need for a mental hospital and epileptic colony to be established somewhere in these northern areas.

CHAPTER XVI.

THE SCHEME IN OPERATION.

In the two preceding chapters I have described in general terms the component parts of a satisfactory medical service, the preventive and the curative. I have pointed out that the eradication of infectious diseases requires a combination of both these. In actual practice it is desirable that there should always be close contact and co-operation between them. I want now to show how this can be established and how the scheme would work. The most important part of it would be the outstation dispensary or clinic, which would be an advance post in close contact with the people and from which the main attack upon disease and its causes could be made. These dispensaries would not be any longer simply places to which sick people go to find a nurse or doctor to cure them of their disease. They would also be active teaching centres for the spread of new knowledge of how to promote health and avoid sickness. They would be used by both the public health officials and the hospital staff, and would form a close link between these two medical teams.

The dispensary, would, of course, be in charge of a competent nurse and midwife, who would be available to treat those who come asking her help. In cases of urgency and danger she would be able to telephone to the hospital for help, but she would deal herself with the simple, straightforward conditions, keeping careful records of her work for inspection by the doctor or the nursing supervisor. School children from nearby schools would be sent to her by the teachers as soon as they were noticed to be suffering from any sickness or injury, and she would visit any children absent from school through illness. A doctor from the hospital would visit the dispensary once a week, see all the patients she is treating, give advice in regard to further treatment, and if necessary, take some back to hospital.

During the week she would have certain days for conducting antenatal and child welfare clinics. She would also be available for attending women during their confinements and in this she would probably have the help of a student nurse who would be preparing to qualify as a midwife. Whenever she came across a case of infectious disease, she would arrange to have the diagnosis confirmed by a doctor, and the patient suitably treated, but she would also notify the Medical Officer of Health for the district, who would see that his assistants arrange for all the patients' contacts to be examined and, if necessary, treated.

Something of this kind is done now in the case of leprosy. If I find a leper amongst my patients, I notify the magistrate who arranges for the patient to be taken to a leper hospital. Enquiries are made as to possible contacts and these are ordered to report every six months for examination. No such provision is made in the case of the far more infectious disease of tuberculosis. With the present machinery and organisation this examination of discharged lepers and leper contacts is

very difficult, and gives everyone concerned endless trouble, but with a well staffed health service in the district, it should be much easier to arrange, not only in the case of leprosy, but of all infectious diseases. The health officials would also be notified of any venereal disease patients who failed to report for treatment, and would be responsible for tracing them and seeing that they were persuaded to continue with treatment for as long as necessary.

As the work increased it would almost certainly be necessary to have more than one nurse at each dispensary. Quite early in the development of the scheme it might be possible to attach a school nurse to each centre. She would then not only attend to the children's needs for treatment, but would keep records of each child's progress, weight and height, and give special attention to any found to require particular care as regards feeding or the correction of any defects.

Each dispensary should have a model garden attached to it where the nurse could grow vegetables for her own use, and which could be used to demonstrate the value and use of those grown. Simple cooking lessons might also be arranged for women and senior girls to encourage the use of these vegetables.

Alongside the nursing service there would also be a public health service using the dispensary as a base for its operations. Each dispensary would have attached to it one or more male "health assistants," whose work would be concerned with the prevention of disease rather than the cure. At first they would be concerned more with education and propaganda, but gradually they would try to improve housing, sanitation, water supplies, and the eradication of infectious disease. They could make an excellent start by tackling the malaria problem. They would visit kraals, spray huts, distribute quinine or other remedies, look out for and prevent the breeding of mosquitoes, and demonstrate to the people that this disease really can be controlled. It will require an intensive and persistent campaign to achieve this, but it can be done.

These assistants would also advise in regard to the building of better houses, encourage the use of latrines and fly traps, and make regular inspections of those already erected. It is essential, of course, that they should approach the people in a friendly way and not give the impression that they are bullying them. They must also keep an eye on the protection of springs and the upkeep and cleanliness of any bathing places which may be provided. In short, they would be sanitary inspectors with special training for the needs of rural areas.

As they move about amongst the people they may come across cases of sickness, and these they would report to the nurses at the dispensary. Where the patient is able to do so, he would be encouraged to attend at the dispensary, but whenever necessary a nurse would visit the home, and see that a doctor's services are procured if they are needed.

The Medical Officer of Health, or his assistants, would of course frequently visit the dispensary and supervise the work of his subordinates. He would probably arrange to give lectures and demonstrations at each centre, and would illustrate these with suitable cinema films. He would

in fact, try to direct his team in an intense campaign against the apathy and inertia of the whole mass of the population, in whom they would seek to awaken a real health consciousness and a desire to achieve a higher standard of cleanliness and good living.

The dispensary should also become an office for the registration of births and deaths. It is essential that we should make an effort to obtain these vital statistics, but it is not going to be easy. The Native people will be exceedingly suspicious of our motive in introducing such a measure and it will certainly not be successful if we expect them to walk many miles across country to a magistrate's office to report the birth of a baby or the death of a relative. If, however, they can come to a nearby dispensary where they are accustomed to look for help, and they find that a real attempt is made to help them to care for each baby reported, we can hope that in time their suspicions will die down and their co-operation will be obtained.

Clearly this scheme will need to be co-ordinated with other activities in the district, and will require the co-operation of administrative and agricultural and educational officials. To this end I suggest the formation of a technical committee for the district to consist of the Native Commissioner, the Agricultural Officer, the Medical Officer of Health, the Hospital Superintendent and the School Inspector. This Committee would prepare plans for the close integration of the work of all the departments represented, and would be responsible to the Government for preparing estimates of the work to be undertaken each year and for reporting on what is being accomplished. They would have direct access to the central controlling authority, and not have to obtain approval for their plans and estimates from a succession of officials who are not thoroughly acquainted with local conditions. The aim should be to encourage the men on the spot to solve their problems, and devise the most suitable measures for this purpose. The central authority must exercise control over general policy and expenditure, of course, but should not stifle initiative by subordinating the district officers to a hierarchy of officials bound to their office desks.

That, then, is a plan which I am sure can be made to work in my own district. Whether it can also be applied elsewhere, I cannot say, but certainly the general principles can be applied anywhere. The actual conditions and diseases vary considerably in each district. Here, for example, our chief problems are malaria, bilharzia and eye diseases. Elsewhere tuberculosis may be the predominant and most dangerous disease. The scheme can be modified to meet local conditions and needs, and the staff to be employed can be given special training for that purpose. In that connection I believe it will be very important to aim at using local men and women, as far as possible, in each district. In my own district, it will never be as successful as it should, if it is staffed by Zulus or Xhosas who are just as ignorant of the Venda language, customs and habits as any European, and are often very contemptuous of them.

I have described the scheme in some detail because it is absolutely essential to have a clear picture in our minds of the kind of service we aim

at providing, before we can decide upon the staff that will be required and the training that staff will need. Some years ago, the Government started training "Medical Aids." These were young Native men who were to be given a five years' course after passing their Junior Certificate and then to be used to assist doctors in Native areas. This scheme had great possibilities, but in practice it has proved most disappointing. The main reason for its breakdown was that no one had a clear idea of the kind of service for which these men were to be trained. They were actually given a training which made them as much like doctors as possible, and when their training was complete it was found that they could not legally be employed in such a capacity. Personally, I think it was undesirable that they should be so employed. The moral, surely, is that we must make our plans first and then adapt our training to fit into them. In the scheme I have outlined we shall need doctors, nurses and health assistants or sanitary inspectors, and we must train each of these classes to fit them for the special duties they will have to perform in the complete health service.

I once gave an address to a group of Native teachers, in which I outlined some of these ideas in regard to future health services. When I had finished, one of them stood up and said that the great difficulty was an economic one. He pointed out that on his present salary he could not afford to build himself a big house, whereas, he said, if he were getting £20 or £25 a month he could do so. Actually, he was thinking in terms of size and failed to realise that I was suggesting the possibility of being able to find cheap but satisfactory ways of improving Native homes by adopting better methods of building than those in use at present. None the less, that teacher put his finger upon a real difficulty. The truth is that we cannot isolate health problems and deal with them apart from all others. If we really want to improve the Native's health we must improve his general living conditions, we must lift him out of his poverty, we must remove his ignorance and combat his superstition, and in many cases, we must overcome his inertia and apathy. We must educate him and train him to become a useful and productive member of society, and see that he gets a decent return for his labour. Our present system of education results in the creation of a small group of fairly well educated individuals, who tend to become isolated from their fellows, and through whom we can hope only slowly to influence and uplift the great mass. The need for trained leaders and teachers must, of course, be met, and we cannot, therefore, abandon this system, but something more is needed which will affect the entire population and result in a mass movement towards better things. Health education is one line of approach towards this, but only one, and it will fail to achieve its objectives, if the people are unable to obtain the means to apply its lessons and to aim at and maintain a higher standard of living.

CHAPTER XVII.

CONCLUSION.

My tale is told, and my dream of what should be has been unfolded, but before I lay aside my pen I wish to make an appeal to my fellow South Africans on behalf of the Native people of our land. We are told sometimes that there are no South Africans, but my wife and I still describe ourselves by that term. She has a better title to it than I have, since she was born in this country, but apart from a few very hazy recollections of early childhood, all my memories are of South Africa and I have no other homeland. I grew up in Natal and more or less absorbed the general attitude towards the Native people, although I had the great good fortune to possess a Christian home in which I learnt to know and respect many earnest missionaries. The idea of becoming a missionary myself was early implanted in my mind. There was a time when I rejected that idea and planned another career for myself, but in 1925 I went to Scotland to study medicine with a view to becoming a medical missionary. Six years away from home made me more convinced than ever of my attachment to South Africa, and then I had to choose where my future work would be. I had very much hoped to return to this country to work under the Church to which I belonged, and to find the support for my work in South Africa, but it became apparent that this hope could not be realised. I began to think of other fields, more particularly of the Congo and of Palestine. The work in both these countries had a strong appeal and there were hospitals there needing doctors, but all the time I felt that my first duty was to South Africa and to its Native people, and in the end this was decisive. I came back to spend two years in the Transkei and then the opportunity offered through my old friend and schoolfellow, Dr. G. W. Gale, for me to come north to the Zoutpansberg to work under the Church of Scotland. I shall always be grateful to that Church for making it possible for me to undertake the work I have described in these pages and for the remarkably free hand they have allowed me in developing it.

Eleven years have passed since I settled here, and they have been strenuous, but happy, years. There has been great satisfaction in building up a hospital and extending its services amongst a people who were formerly quite out of reach of modern medical aid. There have been disappointments and disillusionments. I came back to South Africa with all the pride of the newly qualified doctor thinking I had only to start work amongst the Native people for them to come in ever-increasing numbers to avail themselves of the services I would provide for them. I soon found that it was a long and difficult task to overcome their suspicions and gain their confidence, and that my practice must be built up slowly and conscientiously, year by year. Yet we have been very happy working amongst these Native people, and we know that they have appreciated what has been done for them.

Here let me pause to say how faithfully and devotedly some of them

have served us. Amongst many others I must specially mention my orderly, Philip Shithlangu, who has been with me for over ten years and is now due to retire. He has accompanied me cheerfully and willingly on many a long and weary journey through these mountains. He has always responded to any call I have made upon him for special help. He has saved me from many mistakes and helped me to understand my patients better, and I owe a deep debt of gratitude to him. It is sometimes said that the Natives have no sense of gratitude, but that is untrue. One young Native woman served us most loyally for several years. Recently we asked her to come back to help us during a difficult time and when she came she said: "I do not want any pay for this. I remember all the kindness I received from Doctor and his wife, and I want to do this work now without money to show my thanks."

I have tried in these pages to look back into the years spent here, and to tell something of what I have learnt of the needs and sufferings of our Native people, and I have set down these experiences in the hope that they may stir the hearts of my fellow South Africans to ask themselves again: "Who is my neighbour?" Have we not a duty to these Native people in our land? Ought we not to do more than we have done in the past to relieve their sickness and minister to their needs? Even if we cannot share in that work ourselves, we can try to make our influence felt and join with others in insisting that our Government shall make much greater provision than it has done so far to provide the necessary services.

My wife and I have constantly had before us this motive for our work, that we, as South Africans, should try to bring help and relief to the Native people. As the years have passed, we have learnt that love of country in itself is not enough, nor can even the sense of achievement always satisfy. There have been times when we have felt ready to give up and seek an easier sphere, with more opportunities for home and social life, but always there has been an inner compulsion, a sense that we could not desert our post and keep our peace of mind. Looking back, we realise that we could not have persevered, had it not been for the faith we learnt in childhood from our parents.

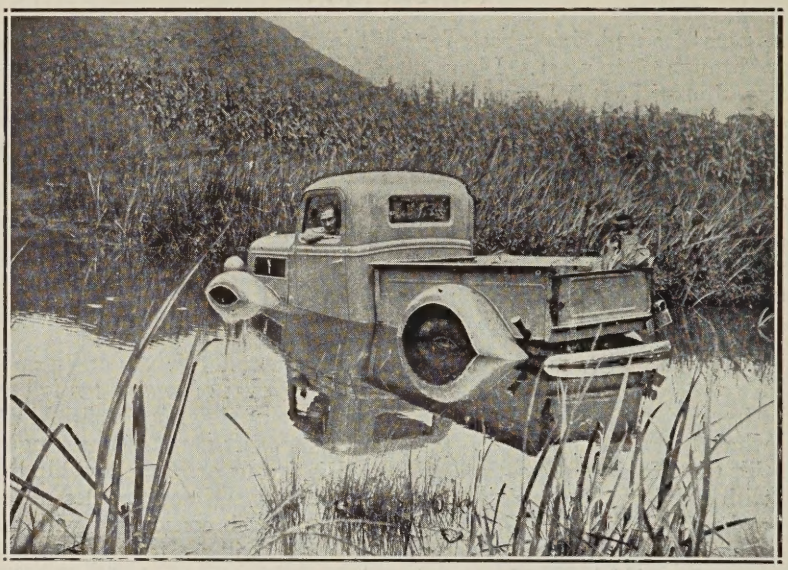
In his noble introduction to a volume on Post Graduate Surgery, Lord Moynihan wrote: "To give courage to those who need it, to restore desire for life to those who have abandoned it, with our skill to heal disease or check its course—this is our great privilege. Ours are not the mild concerns of ordinary life. We, who like the Happy Warrior, are 'doomed to go in company with Pain and Fear and Bloodshed,' have a higher mission than other men and it is for us to see that we are not unworthy."

Those of us who seek to follow that mission in remote and lonely places, far from the help and advice and support of colleagues and friends, need an inner sense of avocation and a faith to enable us to follow the pathway to the end. It is not easy to put that faith into words or to convey to others the sense we have had that the work is not ours but Another's. During the years I have been here I have had in my desk a sheet of notepaper on which a friend once wrote for me the words of one of my most honoured teachers and friends. They express far better than I can the faith which

has been the underlying basis for my life, the faith which has sustained me through these years. I have often failed to put it into practice, but I know that without it I must long ago have given up and sought an easier task. I shall end this record by taking a great liberty and quoting these words from an address by Dr. Lechmere Taylor, for many years a medical missionary in India. Speaking to the graduates of the Punjab University at the Convocation of Murray College, in 1933, he said :—

" I believe, gentlemen, in a God who is intensely interested in me ; a God who has made me with a special purpose, and who is ceaselessly striving to enable me to fulfil that purpose ; a God who is in all His ways most holy, pure and just, and requires of me that I be an imitator of Himself ; a God who will not let me escape the consequences of my ignorance, folly and sin, but by letting me suffer for these (though He often mitigates mercifully their effects) is ever educating me to be a wiser and better man ; a God who is ready to pardon my sin and failure when I honestly face and acknowledge Him, His pardon consisting of this that He does not cut me off from His favour or His fellowship but with infinite patience recalls me to my better self and enables me to make a fresh start ; a God whom I can approach consciously with the confidence these thoughts engender, and who will not fail to guide and uphold me if I look to Him with an honest heart, not only in moments of urgent need, but in the daily and hourly vicissitudes of common life.

" That is my faith. It may seem to some incomprehensible, to others commonplace. But forged as it has been out of personal experience and tested by the actual needs of my own life, it has stood me in good stead, and it enables me to keep going through life's journey with thankfulness, with hope, with courage and with endurance."



HOSPITAL TRUCK CROSSING A DRIFT

AN OUTSTATION DISPENSARY AT SIBASA